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INCLUDING SYPHILIS



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THE JOURNAL OF CUTANEOUS DISEASES
INCLUDING SYPHILIS

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CONTENTS.

ORIGINAL COMMUNICATIONS.

Tropical Diseases of the Skin. H. RADCLIFFE-CROCKER..... 49
The Relation of the Navy to the Study of Tropical Diseases. SURGEON GENERAL P. M. RIXEY, U. S. Navy.....63
Observations on Skin Diseases in the Negro. HOWARD FOX, M. D.....67

SOCIETY TRANSACTIONS.

NEW YORK DERMATOLOGICAL SOCIETY (November)..... 79
A Case of Perforating Ulcer of the Foot.—A Case of Verrucose Dermatitis.—Necrotizing Chilblains.—A Case for Diagnosis.—Epithelioma of the Nose and Cheek.—Case for Diagnosis.—Epithelioma Successfully Treated by X-ray.—A Case of Parasitic Dermatitis Resembling a Syphilide.—A Case of Atrophy and Deformities of the Extremities Following Universal Scleroderma.
MANHATTAN DERMATOLOGICAL SOCIETY (April).....89
Tuberculosis Cutis.—Acne Keratosa.—A Case for Diagnosis.—Carcinoma Linguae.—Benign Papilloma of the Tongue Coincident with Extensive Leukoplakia.—Chronic Dermatitis with Commencing Atrophy.—Case for Diagnosis.

REVIEW OF DERMATOLOGY AND SYPHILIS.

RADIOTHERAPY AND PHOTOTHERAPY.....94
Value of the High Frequency Spark as a Local Application, REGINALD MORTON.
Phototherapy, SCHAMBERG. Acne and Chronic Eczema, R. H. BOGGS. Superficial Malignancies, SOILAND. Electrical Treatment of Pruritus of the Vulva and Anus. NOIRE. Enlargement of Vessels Resulting from Exposure to Roentgen Rays, AXMANN. Protection of the Roentgenologist, LEONARD. General Résumé by Reviewer.

OBITUARY 96
Adrien Doyon.



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THE JOURNAL OF CUTANEOUS DISEASES

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No. 2

TROPICAL DISEASES OF THE SKIN.

By H. RADCLIFFE-CROCKER, London.

Read before the Sixth International Dermatological Congress, New York, September 9-14, 1907.

IN accepting the task of opening a discussion on Tropical Diseases of the Skin, I assumed a responsibility of more difficulty than I at first anticipated. The size and complexity of the subject is so great that it is difficult to compress into the twenty minutes at my disposal anything more than a skeleton of the subject, and I could scarcely hope that out of such dry bones as I could set before you that a fruitful and practical discussion could arise even from such an audience of experts from all parts of the globe, as those whom I have the honor of addressing. Yet there are only too many moot points in most of the subjects, while the important and well-known lepra, though by no means exclusively tropical, embraces enough for a congress all to itself, which, indeed, it has already had without settling any of the points in dispute. Great Britain, however, from its numerous colonies and world-wide commerce, is frequently receiving its own wanderers and those from other lands, bringing with them various diseases from the tropics, and as a fair share of them has come my way, I thought a little of my personal experience might put a little flesh on some of the *bones* of my skeleton, and might aid in suggesting points for discussion.

Unfortunately, the isolated character of the cases, and the fact that they are nearly all private cases, and that in many instances the patients have left the tropics for some time, are great and often insuperable obstacles to studying the pathology of these affections, and my observations are therefore chiefly clinical. One of the great obstacles to our obtaining correct opinions of the nature and relationships of tropical diseases to those of temperate climates, is that

TROPICAL DISEASES OF THE SKIN.

DISEASES DUE TO VEGETABLE PARASITES.

Scaly	{	Tinea Tropica	{	Various species of large spored trichophyton rarely microsporon.			
		Tinea Imbricata		A large spored trichophyton, very like European trichophyttons.			
Pigmentary diseases	{	Tinea Versicolor.....	{	Microsporon furfur.			
		Erythrasma.....		Microsporon minutissimum.			
		Achromia Squamosa..		Parasites of Jeanselme: In aggravated form in the tropics of Indo-China.			
		Pinta		}	Mexico		
		Mal del pinto					
		Cute		}	{	Columbia Venezuela	
		Caraate					{
		Cative		{	Gautemala Honduras		
		Quirica				{	Panama
				Identical or analogous diseases.			
		Deep seated suppurating lesions		{	Actinomycosis		{
Mycetoma	{		Pale Black Ked				
	{						
	{						
Protozoic Dermatitis							

ANIMAL PARASITES.

Nematoda	{	Dracontiasis		
		Craw Craw		
		Elephantiasis Arabum		
Trypanosoma	{	Trypanosomiasis or sleeping sickness.		
		Furunculus Orientalis		
		{ Immature Trypanosoma or Leishman bodies.		
Insecta	{	Chigoe		
		Myases		
		Ixodes		

FUNGATING GRANULOMA LESIONS.

Frambesia	{	Yaws	West Indies	}	General spirochaetic diseases
		Paranghi	Ceylon		
		Krocma	Upper Burmah		
		Dana Bai	Cambodia		
		Khunscarata	Siam		
		Khi Kai Chine	South Lastea		
		Khi Mo	North Lastea		
		Coko	Fiji		
		Tona	Polynesia		
		Tonga	North Caledonia		
		Verruga	Peru		
		Bombas	Brazil		
Local	Granuloma Inguinale Tropicum		West Indies, India and Fije		

TROPICAL ULCERS, ETC.

Furunculus Orientalis	Aleppo Boil	} Leishman bodies— Early forms of trypanosoma
	Delhi “	
	Biskra Bouton	
	Gafsa “	
	Kandahar Sore	
	Pendjeh “	
	Edemic “ of Bahia	
	Annamite Ulcer	
	Peru of Malay	

Phagedena Tropica	{	Same as hospital gangrene due to an aerobic bacillus (Boinet) an anaerobic bacillus (Matzenauer).
Aden, Malabar and Madagascar Ulcers		

Veld or Natal Sore	South Africa	{ Staphylococcus aureus
Barku Rot	Queensland	

very few who have lived and worked in tropical climates have had a dermatological training, and good observers and recorders though they may be, yet they lack the advantage of being able to compare with first hand knowledge the two classes of diseases. We on our part, are in a similar position as regards many tropical diseases.

A glance at the above tables shows that practically all exclusively tropical diseases of the skin are due to parasites of various kinds, and although there is still much room for further investigation, they also show that much of our knowledge of their pathology has been worked out quite recently, and now that so many of those who are going to practice in the tropics are undergoing a course of training in modern pathological methods, we may well expect that in the near future, still greater additions to our exact knowledge will be made, and it is only exact knowledge which will enable us, not perhaps to treat the diseases themselves better than we do now, but still better to adapt the most efficient means for the prevention and spread of affections in which the disabling effects and mortality are so great. How much can be done in this direction the results of the discovery of the relation of the mosquito to filaria, malaria and yellow fever, are known to all.

The tables do not pretend to give a scientific classification of tropical skin diseases, but I trust that they may be helpful in grouping the principal pathological and clinical features. I have not put lepra down, as it is a disease which extends from pole to pole and at all events stands by itself.

TROPICAL RINGWORM.

I have met with numerous cases of tropical ringworm from China, Burmah, India, Ceylon, Northeast and Southwest Africa, the West Indies, and various parts of South America—it is probably universal in all tropical countries. While its special site is in the crutch and axillæ, it may attack other parts where its characters are less marked than in the usual positions, and so its nature may be overlooked, and I have seen several instances where the neck, legs, feet and nails have been the seat of lesions. On the legs, the lesions are more or less circinate and well defined, but on the soles the circle is often fragmentary and only here and there a segment may be found which, with the history of residence in a tropical country, may afford a clue. The nails present nothing characteristic, but they will probably be thickened, crumbling, discolored, dull and with an uneven surface. One fact must be borne in mind, of which I have seen several instances, viz., that in temperate climates, the eruption may die away altogether for months in the cold season, and reappear with renewed vigor when the climatic temperature is raised.

While the clinical characters of the eruption do not sensibly vary in cases from different parts of the world, it is otherwise with their cultural characters. I have handed to my colleague, Mr. Pernet, many specimens, *i. e.*, scrapings of skin and nails from ringworm from various parts of the globe, amongst which may be mentioned Manila, China, the Cape, Japan and India, and under the microscope they were all large spored trichophytions; but they differed considerably in their cultures. Pernet writes to me as follows: “Microscopically, they varied in appearance, but it was more common to find long, sometimes very long, slender dichotomously branching mycelial filaments, often plain or only showing short segmentation here and there. In other cases, the sporulation was extremely well marked, the individual segments varying in shape and size, being either squarish or shortly rectangular, barrel-shaped, oval or distinctly round—in the latter case with a central dot. In some instances the nails were also affected and fungus was found in those structures. As to cultivations chiefly on maltose agar, they also varied. In one instance, the growth was of a distinctly pale pink hue at first. In another, a case of Dhobie itch, the second subculture was more like trichophyton megalosporon ectothrix, opaque, white and powdery. It is probable that the fungi belong to the trichophyton megalosporon group, but of different varieties. This

would agree with Sir Patrick Manson's view that Eastern ringworms are attributable to a large variety of fungi, and probably many of them are derived from the lower animals. I have not found the *microsporon minutissimum* of *erythrasma* which Manson thinks produces many cases of "Dhobie itch."

At University College Hospital, there have been several instances of packers undoing Japanese goods, which often arrive packed in straw or a kind of reed, contracting an agminated pustular folliculitis with circular lesions made up of closely aggregated pin's-head pustules on an erythematous base, but not raised up with the kerion-like appearance of Leloir's conglomerative pustular perifolliculitis. On microscopical examination, fungus elements with large spored ectothrix characters were readily found on cultivation. A pure culture from the first was produced with the typical characters of *trichophyton melagosporon ectothrix*, proving also the pyogenic properties of the fungus.

Jeanselme describes cases of negroes of Senegal with *tinea tonsurans* due to *microsporon Audouini*, but admits that most come from *trichophytons*, different both from each other and from French specimens. Courmon isolated two varieties. Sabouraud, in a young African from the Soudan, obtained a faviform culture from what was clinically a *tinea tonsurans*.

It is evident, therefore, that while the great majority of cases of tropical ringworm are due to *trichophytons*—of various species—the other forms of fungi play some part in their production.

Manson goes farther and asserts that the *microsporon minutissimum* of *erythrasma*, will in a tropical summer excite a dermatitis of a bright red color which resembles the inflammation produced by a *trichophyton*, and that many cases of so-called Dhobie itch are really inflamed *erythrasma* which has extended beyond its usual limits, and, secondly, pus inoculation may be produced by the violent scratching.

In cold weather it dies down with the usual reddish brown discoloration.

The *microsporon furfur* of *pityriasis versicolor* produces, as is well known, on the skins of the dark races, patches paler than the normal pigmented skin, the yellowish fungi flourishing exceedingly in hot climates and forming a yellow layer concealing the pigment beneath. Inflammation of the skin may also be excited by this fungus in hot weather, and again Manson says some cases of Dhobie itch are due to this fungus.

Tokelau ringworm on the other hand, appears to be confined to the southeastern portion of the globe, Polynesia, the Indo-Chinese Peninsula and south coast of China, Siam, Assam, Tonquin, but I have no personal observations on the subject, and as I can, therefore, only quote from the well known authorities on the subject, I will leave it to others to discuss this contagious disease, merely remarking that Nieuwenhuis, of Java, and Sabouraud regard the fungus as a large spored trichophyton like the animal forms of Europe.

The same might be said of Pinta and its congeners, and as it is a disease of this continent, I shall hope to hear personal experience and research from some members of this congress.

I should like to hear whether the diseases comprised under these names are one pathological entity or several closely allied affections due to different organisms.

I have never had a mycetoma under my care, but have had an actinomycosis from the west coast of Africa, in a colonial surgeon in whom it had commenced two years before, as an abscess over the left hip, which had resulted in a brawny hardness with numerous sinuses from which yellowish gray granules from a pin's-point to a No. 4 shot, could be squeezed; these presented the usual microscopic characters. Incidentally he owned to being a morphia and cocaine consumer, and had taken ninety grains of first, and fifty of second per diem.

Sabouraud says that there is in the extreme east an undescribed dermatomycosis, of which he has seen three examples which the patients said were due to frequent and prolonged immersion in stagnant water (Karaaté is also said to be due to this). One of Jeanselme's patients also attributed it to having his feet in marshes, and said that the lesions began in the lower extremities below his drawers.

Original lesions consist of erythematous plaques, more scaly than red, which become circinate when over two or three centimeters in diameter—but circination is incomplete or segmentary. The lesions may be extremely numerous and predominate on the lower half of the body. In dependent positions, there may be large polycyclic patches, but only one-third or one-half circles; the rest is badly defined. The base is bistre brown or even black. The border is scored by excoriation from scratching sometimes with bloody crusts, as the itching is sometimes ferocious, hence may follow thickening of the skin, with lichenification principally at the circinate borders. This border may then present polymorphic lesions, scaly, finely vesicular lichenified

and excoriated lesions, but the aspect as a whole is quite characteristic.

The microscope easily shows mycelium, separate, not double contoured, and of diverse forms, but with banana-like curves predominating, while the mycelial spores round are of variable diameter and are shed without forming a filament by their union. Jeanselme was unable to obtain cultivations. In one case there was double contoured mycelium and altogether he considers it a very distinctive dermatomycosis. He considers the patches on the inside of the thighs and buttocks particularly constant and characteristic. Cases came from Japan, Tonkin and Indo-China. One patient got it twice, but the disease disappeared gradually and spontaneously in Europe.

Mercury, sulphur, pyrogallic acid, salicylic acid and resorcin in large proportions failed, while chrysorobin, one per cent, to three per cent., cured rapidly.

Erythrasma, due to *microsporon minutissimum*, is very frequent in the tropics (so Manson also says) and forms dull red patches in groins and axillæ in cold, while in hot weather it becomes bright red and itching, and then extends beyond its usual limits to neighboring parts. The patient scratches, inoculates pus germs and small abscesses and boils may ensue.

Jeanselme has also observed on the coast of Annam and other parts of Indo-China, a vitiliginous squamous dermatosis which the people of Laos at Bankok call *Khi*. He suspects it to be parasitic, but had not examined it.

It begins in infancy or adult age, and progresses very slowly. The palms and soles are double their usual thickness by a horny layer which forms deep sulci at the natural folds. At the base of this keratosis diffusa, numerous horny discs, more or less adherent, which are situated at the dilated orifices of the sweat glands, become detached. The keratoderma spreads to the back of the hands or feet and reaches above the wrists and ankles.

At the level of the invaded area the skin loses its elasticity and cracks. It is sown with little horny masses, chiefly grouped on the back of the metacarpo-phalangeal and interphalangeal articulations.

The affected skin presents achromic portions punched out like a puzzle and with a remarkable sharpness of contours which alternate with islets of hyperpigmentation of a sepia tint.

At the upper margin of the lesion at the level of the wrist or ankle, the vitiligo is gradually transformed into an erythemato-squamous condition. This zone of activity and extension, of which

the design is very capricious, is bordered by a fringe of psoriasiform scales or rather is covered with papules low and obtuse of a brownish lilac shade resembling lichen obtusus. Beyond this lichenoid or psoriasiform fringe, are irregularly scattered islets in ectasic glands. The nails of the fingers and toes are often thickened and stratified. They split and crumble without offering any resistance. It is somewhat itchy in the recent parts, but is not painful in the rainy season, the moisture restoring some of the elasticity to the skin, but in the dry season, the keratosis hardens and cracks into bleeding fissures which cripple the victims of the malady.

The malady is incurable, it is not in any way related to leprosy, and may be associated with chronic rheumatism.

The most striking feature is its family prevalence, which was marked in three out of five cases there.

Here follows a table and as in this husband and wife were affected, he infers contagion more than heredity.

Jeanselme states that since he published this he has found that Nieuwenhuis on *tinea imbricata* (*Archiv. f. Derm. u. Syph.*, Vol. xlv., 1898, p. 164), has described a similar disease in Java. He says that parasitocides such as sublimate, iodine and chrysarobin can cure the disease, and thinks its parasitic nature is certain.

FURUNCULUS ORIENTALIS

The sores which have various local names as in the list given in the tables, have all similar characters, and probably are all of the same pathogenic origin. It is best known in the east, but de Souza's observations on the endemic sore of Bahia show that it occurs in the west also, and probably it will be recognized in other districts as more accurate studies are prosecuted. Diplococci have been described by several observers as the pathogenic organism, but Wright's, of Boston, more recent observations suggest that the Leishman bodies are the real agents. These bodies are minute spherical or oval bodies with two chromatic masses, one very minute and deeply staining, the other large and less deeply stained. Leonard Rogers confirmed by Leishman himself and Christopher, have shown that in a suitable culture medium they develop into flagellated organisms of the trypanosoma type, but differ from the ordinary form.

Manson suggests, "that the 'Leishman body' leaves the human organism in the discharges from ulcerated surfaces; that it is ingested by some foul-feeding fly, in which it undergoes evolutionary changes and probably of multiplication perhaps sexually. The fly

then implants it in the human organism by bite or broken skin surface, and then in the human host it multiplies asexually by division."

Morphologically the "Leishman body" of Oriental sore, is identical with that of Kala-azar, and Manson suggests that its virulence may have been removed by transmission through the camel, but this is only a suggestion.

Clinically, I have met with one case in which a sarcoma developed on the site of the sore, and afterwards generalized with fatal results. In another case, a young lady who had had a Delhi boil as a child, when she grew up, in the scar a tuft of dark hair developed, which I removed by electrolysis.

According to Manson the affection he has described as pemphigus contagiosus is also due to "Leishman bodies."

As far as our present knowledge goes, therefore, we have to regard these affections as localized forms of trypanosomiasis which is somewhat startling and must widen our conception considerably of trypanosomiasis.

As the first of these cases occurred in an army surgeon, on the left cheek, his description of its mode of development is probably accurate and therefore of value. His age was thirty-one; I first saw him on May 15, 1894. The sore began in July, 1893, like a blind pimple or acne spot, visible and palpable, but painless; it enlarged subcutaneously to the size of a pea; then the skin exfoliated and it looked like an abrasion. It continued to enlarge with a succession of thin scabby exfoliations, and when the scab was removed an ulcer was exposed, the size of half an inch, shallow and punched out with a foul but even surface. Then at the end of October it began to fungate and has gradually increased in diameter to its present size of one inch across and one-fourth to one-third of an inch high, forming a strawberry-like plateau. In January an attempt at cicatrization occurred in the center and it became regularly cupped and occasionally a hair formed. This is interesting in relation to the other case where hair subsequently developed in the scar, and shows that the ulceration is not very deep. The cicatrization lasted three or four weeks, and then broke down and there is a longitudinal furrow in the center of the fungating sore. About thirty minims of dirty looking pus was removed every morning. Up to a month ago there was scarcely any infiltration round the fungation. My colleague, Mr. Arthur Barker, shaved it off level with the skin and then tried crasion, but the tissue was too tough and so he dissected the whole lesion out. The patient had complained of abdom-

inal pain just before the operation, but the true cause of this was not suspected, but soon tumors could be felt and he died between five and six weeks after the operation, of generalized sarcomatosis.

GENERAL TRYPANOSOMIASIS.

I have met with one instance of the erythema of general trypanosomiasis. The lesions when fully developed consist of rings or segments of rings from about a couple of inches to as much as a foot in diameter. The very large ones occur on the trunk, but on the face a single ring may embrace the whole cheek. Some describe these rings as well defined, but in one, two inches across, one week old, only a segment was well defined, the other portion shading off.

An early one that I saw began as a red spot about one inch in diameter, like an ill-defined pink blush, but they are by some, said to be well-defined in some instances. In a case of Manson's he especially remarked that they were ill-defined. These patches increase peripherally, and clear in the center until a ring is produced, or it may die down at one portion, and then a crescent is produced. Each lesion lasts from one to three weeks, but a week is the rule.

Besides these characteristic rings there may also be large ill-defined blotches of erythema scattered about, and Manson also mentions rubeoloid spots. My patient was the wife of a missionary on the Congo, who stated that the symptoms began soon after an insect bite on the leg. This was followed by frequently repeated attacks of fever, supposed to be malarial, and she was given quinine in huge doses for a long period, and the erythema was at first ascribed to the drug. She ultimately died of sleeping sickness. Patrick Manson reported this case as the first recognized in England. Habershon has had an exact replica of this case from the Congo also. Mott, who has examined the nervous system, shows that "there is a universal meningo-encephalitis in the form of a small-cell perivascular infiltration" (Manson), and it is this neurovascular paresis thus produced which explains the ringed and other forms of erythema. Although the trypanosoma Gambiense is found in all these cases, it is not yet conclusively proved to be the sole pathogenetic organism. Thus Mott and the Portuguese observers have found a diplococcus pervading the tissues of the body, especially numerous in the lymphatic glands. The species of Tsetse fly known as *Glossina palpalis*, is the transmitter of the trypanosoma Gambiense to man. As is now well known filaria perstans has been found in a large proportion of cases, and was supposed to be the materies morbi until it

was shown that sixty per cent. of the Indians of Demerara had *filaria perstans*, but sleeping sickness was unknown there. Farther, in Africa, numerous cases of sleeping sickness were found with no *filaria perstans* present.

The "Veld," the "Natal sore," and the "Barku rot" of Queensland are probably identical, and Harland claims that the *staphylococcus pyogenes aureus* is the materies morbi of the Veld sore. If this is correct it will in all probability be the same for the Natal sore and Barku rot—though it is maintained by the same writer that the Natal sore and the Veld sore are not the same.

The Phagedenic Ulceration of the tropics, Aden and Malabar ulcer and the Madagascar sore are probably identical. Phagedena tropica is met with in tropical latitudes all over the world, both east and west, and even in more northern latitudes, such as Algiers, Egypt, the shores of the Red Sea, while it is at its worst in Cochin China and Tonkin. It may be mild and chronic, or acute and severe; it starts often from a trifling lesion, and is almost entirely propagated by inoculation. It is by the majority of observers thought to be identical with hospital gangrene, for which Matzenauer finds an encrobian bacillus, while Boinet in phagedena tropica found an aerobic bacillus, so that the true organism is not yet decided.

YAWS.

Yaws is one of the most serious of tropical diseases, on account of the severity of its lesions, and of the enormous number of its victims in the countries in which it is endemic, which comprises practically the whole tropical zone, very few natives escaping, partly because mothers often deliberately inoculate their children to get it over, though some authors assert that it is not protective, while others say that it generally is, but that second and third attacks may occur (Nicholls). This is an important point on which I hope that some members of this congress with practical experience, may enlighten us. The main question is whether yaws and syphilis are identical, or only analogous diseases. We all know that Mr. Hutchinson has written a large volume setting forth that they are identical, but only the evidence of trained, practical observers of yaws, supplemented by experiments, clinical and pathological, are of value in settling such an important point. One difficulty has arisen in the past, viz., that it is probable that some observers have in their descriptions of yaws in some instances, mixed up the lesions of syphilis with those of yaws.

Quite recently a spirochæte resembling the spirochæta pallida of syphilis, has been described by Castellani. This and the clinical fact that the manifestations of yaws yield to mercury and iodide of potassium, judiciously given, no doubt lends more color to the theory of identity, but it by means proves it. Similarity of form and staining reactions is a long way from proof of identity of which the bacilli of tubercle and leprosy are a striking example. While if yaws is due to a spirochæta analogous but not identical with that of syphilis, an explanation would be afforded of the good effects of mercury and iodide of potassium. Probably inoculation experiments on anthropoid apes would assist in clearing up the point. Meanwhile we must still rely on carefully observed and recorded clinical facts and these are difficult to obtain in an indisputable form. Thus as above stated, some say that yaws is not protective against itself, while others say that it usually is, while syphilis we know is protective in a very high degree against itself. Then some say that yaws cannot protect against syphilis, nor syphilis against yaws, while others hold the contrary opinions. This, it seems to me, is the crux of the whole matter. Powell and Charlouis, both good and reliable observers, have each observed two cases in which persons with yaws have contracted syphilis with the usual symptoms coexisting with the yaws lesions. If the truth of these observations be admitted, it appears to me that the controversy is at an end and that yaws and syphilis are absolutely distinct diseases. Still it would be more satisfactory to have further corroboration on the clinical side on the one hand, and further investigation on the differentiation or otherwise, of the respective spirochætic organisms. A few other differences may be mentioned; it is said that auto-inoculation of yaws can be carried on indefinitely, while in syphilis this is not possible. The initial lesion of yaws is like the subsequent ones and does not start especially on the genital organs, and the mucous membranes escape except in the later stage of maltreated cases. Moreover, while it is contagious, it is never hereditary and the lesions are neither polymorphic nor symmetrical in the early stage and do not leave scars unless irritated or injured.

The resemblances are, the tendency to form circinate eruptions and for the lesions to group round the anus and other mucous orifices; nocturnal osteo-arthritic pains may be present and mercury and iodide of potassium are important remedial drugs, though they must be given cautiously, mercury being said to be injurious in the primary and early part of the secondary stage, while iodide of

potassium is not so efficacious against yaws as it is against syphilitic tertiary lesions.

Yaws, Boubas of Brazil and Verrugas of Peru, are evidently closely allied affections, and if a spirochæta is the pathogenic organism of yaws, it is a fair guess that spirochætæ will be found also in Verrugas and Boubas.

GRANULOMA INGUINALE TROPICUM

I have met with a case of this disease in a full-blooded negro. A point of interest in his case was that he had left the West Indies five years before it began as a flat sore on the penis behind the corona, attributed to impure intercourse nine days previously. He told Pringle, into whose hands he subsequently fell, that it began as a pea-sized boil in the right groin, which was scratched into a sore and spread down the scrotum at the side and up along the groin. Probably each of these statements was true for each situation, but that the penis was the primary point of infection. This case occurred before the publication of Conger's and Daniel's monograph, which showed that it was fairly common in British Guiana and the West Indies. Since then it has been noted in India, Fiji, the New Hebrides and New Guinea, and it probably occurs in all tropical countries. Goldsmith records a case in a white man who had had intercourse with a black woman. An apparently identical, but less extensive condition may occur in white persons in temperate climates and it seems therefore probable that the excessive development is racial rather than climatic, corroborated by my case having left the tropics for five years before it began, and having contracted it from a white woman. I am inclined, therefore, to regard it as an instance of staphylococcic infection which takes a virulent form in black races, but this is only conjecture and it ought not to be long before the real pathogenic agent is discovered. Removal has to be radical or the disease recurs.

CRAW CRAW

I should much like to hear any first hand information about crawl crawl. I have had two cases from the west coast of Africa, in which the patients were told they had crawl crawl, but one was a case of common scabies and the other of *tinea tropica*. Brault after analyzing the descriptions of other authors came to the conclusion that it was a sort of limbo into which African skin diseases which were not diagnosed were cast, and that it was not a distinct morbid

entity—but Geber came to the same conclusion with regard to *furunculus orientalis*, which is now universally accepted as a separate disease. Emily, a French colonial surgeon, gives a very succinct account of it, as a severely itching disease, producing deep ulcers, some as large as a five-franc piece, but these may easily be the result, in a hot country, of violent scratching. Jeanselme apparently regarded it as a virulent boil. Nicholls saw it in St. Lucia and coolie itch resembled Emily's description of *craw crawl*.

The finding of *filaria* in connection with *craw crawl* goes for very little, as Manson has pointed out that the central African population are almost universally affected by *filaria perstans*.

I am conscious of the fragmentary character of the above observations but they will I trust yield sufficient material for fruitful discussion.

THE RELATION OF THE NAVY TO THE STUDY OF TROPICAL DISEASES.

BY SURGEON GENERAL P. M. RIXEY, U. S. NAVY.

Read before the Sixth International Dermatological Congress, New York,
September 9-14, 1907.

WHEN I first received the highly appreciated invitation of the Organization Committee of the Sixth International Dermatological Congress to make a short address upon the relation of the Navy to the study of tropical diseases, it naturally appeared fitting that I should first take up the consideration of that branch of tropical medicine dealing with affections of the skin. The importance of this section of the diseases of the tropics is, however, so paramount in the Navy that I shall only be able to briefly refer to the lines of investigation which have been and are being pursued by the officers of the Medical Corps of the Navy in relation to cutaneous medicine.

That this statement is based upon fact and not expressed merely for the purpose of harmonizing with the object of this Congress is best shown by the statement that, taking a period of ten years, I find diseases of the skin caused practically twice as great damage to the health of the Navy as was caused by all other diseases of a quarantinable nature. When it is considered that I include such diseases as diphtheria, measles, smallpox, scarlet fever, r  theln, etc., in this latter category, the full import of my statement can be appreciated. The actual proportion was as 1 to 1.8. Were I to include syphilitic affections of the skin this disproportion would be greatly increased.

This is an age of research and of exact diagnosis, consequently the practice which prevailed in years past of designating every internal disorder of the tropics malaria and every cutaneous manifestation as syphilis, yaws, oriental sore, or lupus, according to the trend of local medical opinion, no longer holds good.

With the fevers it must now be determined by the aid of the microscope that the malarial parasite is present—otherwise, our attention is directed to the possibilities of affections not formerly recognized. The oft-repeated story that every tropical febrile case is deluged with quinine prior to death or diagnosis is familiar to all of you who have considered the matter of tropical diseases.

With skin affections I feel sure it must be the same, and with this idea in mind, my first aim when appointed Surgeon General of the Navy, in 1902, was to establish a school where the young officers of the Medical Corps of the Navy could be grounded in the essentials of medical research.

It was unreasonable to expect our medical schools to curtail the periods devoted to the essentials of practice of medicine and surgery in order that a more extended course in laboratory work as applied to tropical medicine should be given. Consequently, in the fall of 1902, the first detail of recently appointed medical officers of the Navy was made to the Naval Medical School.

For a proper appreciation of the many tropical skin diseases due to animal parasites, and of the many which may hereafter be found to be of such etiology, it is my belief that a sound working foundation in medical zoology is not only desirable but essential. The Naval Medical School is fortunate in this respect inasmuch as the instruction in this branch is given by a zoologist who is not only eminently practical in his teaching, but who possesses in rare degree the faculty of imparting enthusiasm to those who study under him. I refer to Dr. Charles Wardwell Stiles—the American authority in medical zoology.

For honest and capable work in any branch of tropical medicine it is necessary that the worker be grounded not only in clinical observation, but he must possess a fair degree of proficiency in bacteriology, a good working knowledge of animal parasitology and, besides, have enthusiasm for his work. Scientific curiosity to be of value to the profession must be bred of knowledge, animated by enthusiasm, and controlled by judgment.

The medical officers of the Navy are, while in tropical waters, constantly required to study or treat such affections as ringworm and the peculiarly virulent cutaneous manifestations of syphilis. As regards syphilis, I have been struck by the favorable reports which have reached me from our naval hospital in the Philippines, in which attention is called to the infrequency of the intractable skin lesions, so common previously, after the routine employment of hypodermatic mercurial medication. Mercury by the mouth, or, preferably, by inunction, may control the ravages of the disease in temperate climates, but some factor in the tropics tends to lessen the power of such forms of treatment to control the disease in hot climates.

While serving on shore stations in the tropics, or when cruising in such waters, the naval medical officer is constantly in contact with

such diseases as yaws, leprosy, ground itch, elephantiasis, tropical ulcer, and the like, and in consequence these diseases are of great interest as well as of importance to him in the performance of his duties. These affections, however, are of such common interest and of such general knowledge that I shall pass them over to present to your attention three or four diseases of which I am very desirous that some of our medical officers may advance our knowledge, or give us some insight into their etiology and pathology. Of these I shall first call your attention to gangosa or rhino-pharyngitis mutilans. This disease, which was studied by Daniels in the Fiji Islands, is unfortunately very prevalent in our island possession of Guam. The clinical manifestations of the disease as observed in Guam were brought out by Surgeons Arnold and Leys of the Navy, and more recently by Assistant Surgeons McLean and Mink. During the summer of 1906 I detailed Surgeon Stitt of the Navy to investigate the cause of this disease. The result of his investigation, which was published in my report for the year 1906, was of a negative character. From the work which had been done in connection with the etiology of syphilis and yaws he was in hope that a spirochæte might be found to belong to gangosa, but as to this he was unable to establish any evidence. It is possible that with some of the more recent methods of staining better success may be had.

Dr. Fordyce, the Secretary-General of this Congress, has also investigated the lesions of this peculiar disease, but so far as I have been able to learn, without success as to determining its etiology. Here is a disease which starts as a small membranous patch of the throat which in a few days proceeds to perforation of the hard palate and thence to the most frightful ulcerations of the nasal cavities. Those who have studied it most carefully are positive it is not syphilis and absolutely sure it is not leprosy—what is it?

Sir Patrick Manson recently, in conversation with one of the members of our corps, remarked that in Samoa there should be a splendid field for renewal of the work in connection with filariasis, especially from a pathological standpoint. The determination of the exact method by which lymphatic obstruction is brought about in this disease would be of the greatest importance. One of the medical officers, who served for an extended period of time in Samoa, informed me that although the sailors of our Navy were constantly exposed to infection by mosquitoes while ashore, yet there had never developed among them a case of any filarial disease. The only striking point of difference in habits was in the fact of our sailors drink-

ing distilled water—is it possible that there are other methods of transmission of this disease than by the mosquito?

Another puzzling affection is what is generally termed “climatic bubo.” Here we have a case which presents the picture of a prolonged continued fever following more or less the increase or decrease of the glandular swellings. It is not related to any venereal affection and the question comes up—has it any relation to dhobie itch or other mould affection of the skin, as some think?

Speaking of dhobie itch and the various affections of the skin so common in the tropics, including prickly heat, I am forced to believe that some of the so-called tropical neurasthenia may be connected with these affections.

The constant irritation induced by such conditions, with the attendant loss of sleep, must result in a mental state which, in a person not leading a life adapted to the tropics, will bring on a deterioration of the mental as well as the physical side.

While alcoholic excess and undue exposure to the rays of the mid-day sun may not account for all the phenomena of mental deterioration in the tropics, yet it cannot be gainsaid that such factors will produce marked aggravation of skin lesions and incidentally lead to conditions surely conducive to nervous prostration.

While in temperate climates one may not suffer seriously from neglect of treatment of simple skin affections, yet in the tropics it is a different matter, and in consideration of the fact that the greater part of the time of our force afloat is spent in tropical waters, the importance of this question for the Navy cannot be overestimated.

OBSERVATIONS ON SKIN DISEASES IN THE NEGRO.

By HOWARD FOX, M. D.

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Read before the Sixth International Dermatological Congress, New York, September 9-14, 1907.

IN presenting to you the subject of skin diseases in the negro, I have a double excuse to offer. I feel in the first place that this branch of dermatology has long been sorely neglected. In the second place I have hoped that, as the opportunities to observe negroes abroad are very limited, this subject might prove of interest to our foreign visitors.

Valuable statistics upon five hundred and fifty-six cases of skin disease in the negro have been contributed by Dr. Isadore Dyer of New Orleans. With the exception, however, of Morison who compared five hundred cases of skin diseases occurring in negroes with an equal number of whites, no one has attempted a statistical comparison of skin diseases affecting the two races. Owing to the kindness of Dr. Gilchrist of Baltimore, and Dr. Carmichael of Washington, I have been enabled to make a comparative study of 4400 cases, half of them in the negro and half in the white race.

It would perhaps have been more fitting if the subject had been treated by one of my Southern colleagues whose opportunities for studying negroes are much greater than any we have in New York. My sources of information, however, include a correspondence with physicians in all of the South Atlantic and South Central States, with the exception of Delaware, Indian Territory and Oklahoma, making a total of fifteen states, including Missouri. In this area are to be found approximately nine-tenths of the negroes of Continental United States.

My personal experience has been confined chiefly to the Vanderbilt Clinic in the service of my father, Dr. George Henry Fox. As there is a considerable negro population in the neighborhood of the clinic, very fair opportunities for observing skin diseases in this race have been presented. The majority of cases in my exhibition of photographs are from the Vanderbilt Clinic.

My statistics are partly from the Central Dispensary of Washington, and partly from the Johns Hopkins Dispensary of Baltimore.

The objection that these statistics are from practically one section of the South, Baltimore and Washington being neighboring cities, is a valid one. I should like to have obtained records from several widely separated regions of the South, but it was not possible for me to do so.¹

Though the literature pertaining to skin diseases in the negro is very limited, I have found especially valuable information in the writings of Atkinson, Morison, Dyer, Corson, Matas and Rufz.

The history of our colored population dates from 1619, when the first slaves were brought to Virginia. In 1776 more than 300,000 slaves had been brought to the colonies, and at the end of the Civil War there were four millions of negroes in the United States. According to the twelfth census, that of 1900, there were approximately 8,840,000 negroes in Continental United States, out of a total population of nearly 85,000,000. It seems to me that this vast number of negroes affecting by its presence the statistics of economics, social and political science, must also have its influence on medical statistics and should be worthy of study in every branch of our science.

Although at present the American negro represents a fusion of numerous African tribes, it is still thought possible by some to distinguish certain subtypes. According to Otken, "We have in the United States the Guinea negroes, Yolloffs and Caffres. To these must be added those in whose veins flow one-half, three-fourths or seven-eighths white blood, or the mulattoes, quadroons and octoroons. (The last three are designated usually by the common title mulatto.) The Guinea negroes constitute an overwhelming majority. They are characterized by their woolly hair and black skin, thick lips, broad flat nose, prognathous jaws, receding forehead, slender limbs and massive feet. The Yolloffs in addition to woolly hair and jet black skin, possess a fine form and strictly European features. The Caffres have woolly hair, blackish-brown complexion, and have a fine form and features. The Yolloffs and Caffres may constitute from five to ten per cent. of the pure African race."

Interesting as the study of the various types of American

¹ The statistics from the Central Dispensary include 1200 cases of whites taken from ten consecutive years, 1897 to 1906 inclusive, and a similar number of cases of blacks for eight consecutive years, the blacks at this dispensary being numerically greater. The remaining one thousand cases of each race are from the Johns Hopkins Dispensary. At the latter clinic owing to the disproportion in favor of the whites, the records of one year, February, 1906 to 1907 only, were required to furnish one thousand consecutive white cases, whereas six years (November, 1901 to February, 1907) were required to supply an equal number of cases in the negro.

negroes may be, it is of more practical importance for the purpose of this inquiry to obtain some idea of the numbers of mulattoes in the Southern States, the region from which my statistics were obtained. It was the conclusion of four independent groups of enumerators of the twelfth census, that between one-ninth and one-sixth of the negroes in Continental United States showed an admixture of white blood. The greatest number of mulattoes were found in regions where the proportion of blacks to whites was small and the smallest numbers where the proportion of blacks to whites was large. This is well illustrated by the report of the eleventh census, showing thirteen per cent. of mulattoes in the South Atlantic States, twenty-three per cent. in the North Atlantic and sixty-two per cent. in the Western States. For the purpose of enumeration, all persons were classed as negroes who were considered to be such in the communities in which they lived. The same census showed fifteen and nine-tenths per cent. of mulattoes for the State of Maryland, and the rather high figure of twenty-six and two-tenths per cent. for the District of Columbia, from which a considerable part of my statistics were obtained.

It is the question of mulattoes that presents one of the great difficulties of a statistical inquiry like the present one. If my study could have been confined solely to full-blooded negroes, it would unquestionably have been of greater scientific value. Although my statistical tables include without discrimination all "colored" persons from the octoroon to the full-blooded blacks, I have obtained, however, from my correspondents, some valuable information relating solely to the full-blooded negroes.

A very obvious difficulty to the study of skin diseases in negroes is presented by their deeply pigmented skin. On this account a diagnosis of the exanthemata, rosacea, in its early stages, the various forms of erythema and purpura, and certain pigmentary affections is often difficult and at times impossible.

Another difficulty is presented by the unreliability of statements of many negro patients. The following description of Dr. Grindon of St. Louis, truthfully represents the dense ignorance of a considerable portion of our negro population. "Negroes rarely know their ages, and in stating them are often as much as twenty years out of the way. Women are often 'about twenty' until they cease bearing children. Soon after that they are 'about seventy.' After some ten years of this they are 'over a hundred.'"

In the effort to determine the relative frequency in general of skin diseases in the two races, a further difficulty is encountered by

the fact that negroes do not seem to patronize our public clinics as often as whites. Their numbers in dispensary practice, according to Drs. Grindon, Dyer and Rosenthal, are proportionately less than those of the whites. They are only apt to seek treatment for affections of the skin which cause positive annoyance or pain. Their smaller attendance at our clinics may be due as Dr. Grindon suggests, to the careless habits of their race and to their widespread though lessening prejudice against medical schools, and all that pertains thereto. In order to obtain positive proof that skin diseases are less prevalent in the negroes than in the whites, it would be necessary to ascertain the total white and black population of a community, and to compare this with the total number of applicants at dermatological and at all other combined clinics. Though I have not undertaken such a heroic task, my conviction is firm that negroes do *not* suffer from skin diseases in general, as often as whites.

Do negroes suffer less severely than whites, is a question which naturally follows. It will be one of the objects of this paper to attempt to answer this question in the affirmative and to show that most diseases of the skin, affect the negro *less* severely than they do the whites. This proposition, if true, will seem the more unusual in view of the well-known susceptibility of the negro to a large number of constitutional and other diseases.

That the American negro at present suffers more from disease in general than the white man, is shown by the reports of the last census. The mortality in the registration area for the negro was found to be thirty and two-tenths per cent., while that of the whites was only twenty-seven and three-tenths per cent., or less than half as great. Furthermore, according to Frederick Hoffmann, a statistician of authority, the mortality among the negroes is on the increase, whereas that of the whites is diminishing. The same writer states that the colored race is subject to a greater mortality from all diseases of infancy, consumption at all ages, pneumonia, venereal diseases and even malaria.

Before attempting to analyze the more important skin diseases in the two races, it may be well to remind you of certain anatomical differences in the skin, to which doubtless some of the disproportion in frequency and severity of different skin affections is due. It is well known that the characteristic pigmentation of the negro skin is not present at birth. In speaking of negro babies, Brodnax says, "They are not of the clear pink of the pure Caucasian, but present a color of tallow, a muddy white, not colored or tinted. In cases in

which both parents are true blacks, the deepening of the color is seen in a few hours, and in a couple of weeks, the skin is quite dark, attaining its full depth in about two months." Simonot states that the negro acquires the maximum of his color at puberty, and that old age leads frequently to a certain decoloration of the skin. The light color of the palms and soles, lateral borders of the fingers and portions of the mucous membrane of the mouth, prepuce and vulva, approaches closely to that of the white. The deeper pigmentation is seen upon the posterior portion of the trunk, shoulders, loins, buttocks and upper portions of the thighs. The difference in pigmentation is simply one of amount and distribution.

The entire skin of the negro, especially the derma, is thicker than that of the white. This is also true of the subcutaneous tissue as exemplified by the characteristic thick lips of the negro.

It is in the appendages of the skin that some of the racial differences are most striking. The glandular system is certainly more highly developed in the negro. The greater production of sweat is largely responsible for the suppleness of the negro skin and aids him to endure the intense heat of the tropics. The sebaceous secretion gives to the skin its shiny aspect and characteristic odor.

The short kinky hair next to his dark skin is the negro's most characteristic feature. To the slight development of lanugo hair is largely due the soft velvety feeling of the negro skin. The lessened hairy development is also seen in the hair of the beard, axilla and pubes. Finally, it should be mentioned that the negro is decidedly less susceptible to pain than the white man.

I should like to begin my analysis with a consideration of the effect upon the negro skin of external irritants. Among the latter should be included the sun's rays and other forms of radiant energy, as well as various irritants of vegetable and mineral origin. There seems no doubt that to most forms of external irritation, the negro skin is decidedly less susceptible than that of the white. A hot sun which will severely burn the white skin will have no effect upon that of the negro. Dr. Boyd of Jacksonville, writes me that he considers it very difficult to "blister a pure negro." It would be interesting to know whether the reaction to the X-ray was slower in making its appearance, or milder in the negro than in the white. My experience in treating negroes with the X-ray has been very limited, and I have unfortunately not obtained expressions of opinion upon this subject from my correspondents. My statistics for cases designated as dermatitis and dermatitis venenata (affections due to external

irritants), give a total of 113 whites to 56 blacks, or just twice as many whites as blacks.

An example of lessened susceptibility to vegetable irritants is given by my statistics for poison by the rhus toxicodendron, which showed twenty-two cases in the white against eight in the black. While these figures show a much greater prevalence of ivy poisoning in the white, the disproportion in my opinion would have been much greater in a comparison of whites with full-blooded negroes. In replying to the question, "Is the negro immune to ivy poisoning?" the answer, "I have never seen a case," or "I have never seen a case in a full-blooded negro," has been given by a majority of my correspondents. Many add that they frequently see ivy poisoning in the white race. Four have answered "no," without any further qualification. Dr. Whitehead of Atlanta and Dr. Engman of St. Louis, both write that they have seen some severe cases. Others answer, "Almost immune," or "nearly so." Dr. Strobel of Baltimore, answers "Not immune, but cases very uncommon, so much so that one severe case I saw in a negro boy impressed me." Dr. Bernard Wolff of Atlanta, writes me of a railroad contractor who employed 150 negroes in a region where poison ivy abounded. Not one of these men suffered from ivy poisoning. In the statistics of Morison, and in those of Dyer, no cases of ivy poisoning in the negro are recorded.

TABLE I.
ABSCESS—FROST BITE.

Disease	Clinic	WHITES			NEGROES		
		Total Patients Applying	Cases	Percentage	Total Patients Applying	Cases	Percentage
Abscess, Carbuncle, furuncle, furunculosis, phlegmon	Surgical	4072	750	.184	6873	1056	.153
Frost Bite and Chilblains	Surgical and Skin	6272	26	.00414	9073	78	.00859

Statistics compiled from Central Dispensary of Washington, D. C., for nine consecutive years, 1898 to 1906.

In considering the probable effect of heat and cold upon the negro skin, it would be natural to expect that eruptions due to heat

would be less common in the negro, and that frost bite and chilblains the result of cold would be more common. As a matter of fact, this is rather strikingly shown by my statistics. There were twelve cases of miliaria and heat rash in the white and only two in the black. On the other hand only one white as against fourteen blacks appears under the heading of frost bite and chilblains. The latter figures must, however, be modified as the majority of cases of frost bite at the Central Dispensary at least, were treated in the surgical clinic. I have, therefore, tabulated the cases of frost bite and chilblains that applied at the latter clinic during nine years. Added to the other cases, a total of twenty-six white and seventy-eight blacks is given, or when the total number of patients is considered, the proportion of blacks to whites was two to one. Morison considers chilblains a common disease in the negro, his statistics giving ten cases in the black and three in the white. If chilblains are more prevalent in the negro, and I believe that they are, a reasonable explanation would be that negroes are more exposed, and more poorly clad and housed than their more fortunate white brethren.

In an effort to compare the susceptibility of the two races to the ordinary pus germs, the different varieties of the staphylococci, I have tabulated cases designated as phlegmon, abscess (tubercular, ischio-rectal and alveolar being excluded), furuncle, furunculosis, and carbuncle. My figures which are taken from the surgical clinic of the Central Dispensary for nine years, show seven hundred and fifty whites, and one thousand and fifty-six blacks, or in proportion to the attendance of the two races, eighteen per cent. for the whites and fifteen for the blacks. A similar table of Matas containing nearly half as many cases gives almost exactly the same proportion for the two races. The mortality, however, is stated as being three times as great in the negro. Tiffany's statistics show fifty-seven per cent of abscess for the white and forty-three per cent. for the black. Kinloch says, "I think suppuration in the pure black is less than in the white." On the other hand, Richardson's table, from a much smaller number of cases shows abscess to be nearly twice as common in the negro as in the white. Corson also thinks the negro has a greater susceptibility to pus cocci. My statistics would, however, seem to bear out the conclusion of Matas that "Blacks are not more subject and possibly less so to acute circumscribed and pyogenic infections." The figures in my table for furunculosis alone, show a rather striking disproportion with fifty-two cases in the white and only fifteen in the black.

If it is conceded that erysipelas, contagious impetigo and ecthyma are due to infection by the streptococci, it would appear from my figures that the negro shows a lessened susceptibility to this organism. Of these combined affections, two hundred and twenty-nine were present in whites and one hundred and eighty in blacks. Richardson's table for erysipelas shows practically the same proportion in the two races, while the figures of Matas give seventy per cent. in the white and forty-two per cent. in the black. with again a higher mortality for the latter.

A study of the more important inflammatory diseases of the skin, show, I think, some interesting differences in the two races. I have been greatly surprised to find in my statistics, the comparatively large total of 101 cases of acne in the black as opposed to 163 in the white. If Mulattoes could have been excluded from my table, I am sure a much greater disproportion in favor of the blacks would have resulted. I have for some time scrutinized every negro seen on the street, as well as in the clinic, and am of the opinion that in New York, acne of the face is decidedly uncommon in the full-blooded negro. It may be well to mention that the negro population of our city is somewhat over 60,000, and is only exceeded by that of Washington, Baltimore, New Orleans and Philadelphia. I feel very certain of the fact that acne in the negro is a milder affection than in the white, an opinion with which most of my southern colleagues entirely agree. Well marked cases of acne indurata in the dark race are indeed rarities. While my figures for acne in the blacks show four and six-tenths per cent. of the total cases of skin diseases, Dyer's show only one and nine-tenths per cent. and Morison's one and eight-tenths per cent., all of the latter's cases, nine in number, being mulattoes. Only six cases of acne, of which four occurred in whites, are given in the report of Rufz, a French physician, who practiced medicine for twenty years in Martinique. The careful observations of Rufz in a country where there were roughly sixteen times as many blacks as whites, form a most valuable contribution to the dermatological literature of the negro.

TABLE II.

Skin Diseases (2200 Whites and 2200 Blacks.)

	Whites.		Blacks.	
	Cases.	Percentage.	Cases.	Percentage
Acne	163	.074	101	.046
Alopecia	12	.0054	1	.00045
Alopecia Areata	10	.0045	10	.0045

	Whites.		Blacks.	
	Cases.	Percentage.	Cases.	Percentage
Callositas	1	.00045	3	.00136
Chloasma	9	.0041	4	.0018
Clavus	2	.00091	8	.00363
Dermatitis	89	.0404	50	.0227
Dermatitis Medicamentosa	7	.00318	3	.00136
Dermatitis Venenata	24	.0109	6	.00272
Dermatitis (Rhus)	22	.01	8	.00363
Dermatitis Herpetiformis	5	.00227	3	.00136
Dysidrosis	3	.00136	2	.00091
Ecthyma	28	.0127	16	.00727
Eczema	490	.222	521	.236
Eczema Seborrhœicum	28	.0127	28	.0127
Epithelioma	22	.01	2	.00091
Erysipelas	4	.0018	10	.0045
Erysipeloid	10	.0045	2	.00091
Erythema and E. Hyperæmicum	4	.0018	0	
Erythema Multiforme	21	.0095	10	.0045
Erythema Nodosum	2	.00091	3	.00136
Favus	3	.00136	4	.0018
Folliculitis	5	.00227	9	.0041
Frost Bite and Pernio	1	.00045	14	.00636
Furunculosis	52	.0236	15	.00681
Herpes Simplex	6	.00272	5	.00227
Hyperidrosis	7	.00318	3	.00136
Ichthyosis	4	.0018	1	.00045
Impetigo Contagiosa	197	.0895	154	.070
Intertrigo	4	.0018	0	
Keloid	1	.00045	10	.0045
Keloid Acne	1	.00045	10	.0045
Keratosis	4	.0018	4	.0018
Lichen Planus	12	.0054	8	.00363
Lupus Vulgaris	4	.0018	2	.00091
Lupus Erythematosus	5	.00227	4	.0018
Miliaria and Heat Rash	12	.0054	2	.00091
Paronychia	3	.00136	7	.00318
Pediculosis Capitis	54	.0245	5	.00227
Pediculosis Corporis	15	.00681	20	.00909
Pediculosis Pubis	5	.00227	2	.00091
Pityriasis Faciei	2	.00091	4	.0018
Pityriasis Rosea	7	.00318	6	.00272
Pruritus	3	.00136	8	.00363
Pruritus Senilis	11	.0050	22	.010
Psoriasis	49	.0222	10	.0045
Purpura Simplex	7	.00318	1	.00045
Rosacea	25	.0113	1	.00045
Rubeola	1	.00045	4	.0018
Scabies	243	.1104	170	.0772
Seborrhœa	18	.00818	23	.0104
Sycosis	16	.00727	9	.0041
Syphilis	279	.1268	595	.2070
Tinea Capitis	17	.00772	56	.0254
Tinea Circinata	22	.01	13	.00590
Tinea Barbæ	5	.00227	4	.0018

	Whites.		Blacks.	
	Cases.	Percentage.	Cases.	Percentage
Tinea Versicolor	16	.00727	18	.00818
Ulcus	2	.00091	7	.00318
Ulcus Varicosus	7	.00318	9	.0041
Urticaria	38	.0127	62	.0281
Varicella	6	.00272	17	.00772
Variola	1	.00045	4	.0018
Verruca	5	.00227	8	.00363
Vitiligo	4	.0018	6	.00272
Zoster	28	.0127	31	.01409

Two cases of the following diseases noted in whites—Percentage .00091: Adenoma sebaceum, carbuncle, cyst (sebaceous), erythema nodosum, erythema scarlatiniforme, hæmangioma, nævus unius lateris, papilloma.

Two cases of the following noted in blacks: Angioneurotic œdema, dysidrosis, fibroma, keratosis pilaris, molluscum contagiosum, papilloma, pityriasis, prurigo, scrofuloderma.

One case of the following noted in whites—Percentage .00045: Acne frontalis, acne necrotica, angioma (infectious), balanitis, callositas, fibroma, herpes iris, nævus, onychia, pemphigus, prurigo, pruritus scroti, pruritus vulvæ, purpura (Henoch's), purpura hæmorrhagica, rôtheln, scarlatina, seborrhœal wart, stomatitis, urticaria pigmentosa, verruca necrogenica.

One case of the following noted in blacks: Ainhum, blastomycosis, carbuncle, dermatitis calorica, cornu cutaneum, gangrene, herpes iris, leukoplakia, lichen ruber, lichen scrofulosorum, morphœa, mycosis fungoides, nævus, œdema (wooden), Paget's disease, pemphigus, pruritus ani et vulvæ, purpura (Henoch's), rôtheln, sarcoma, stomatitis, sudamina, thrush, tuberculosis of nose.

That eczema is a common affection in the negro appears from my figures of four hundred and ninety cases in the white and five hundred and twenty-one in the black. It is the most common disease in Martinique, according to Rufz. Twenty-three per cent. of the total number of blacks in my table suffered from eczema. Morison's table gives nineteen per cent. and Dyer's fifteen per cent. for the same disease. It is probable that the presence of mulattoes, influences to some extent, my apparently high figures. The majority of my southern colleagues consider eczema to be less frequent in the negro. Practically all agree that it is less severe. Dr. Carmichael writes, "It is equally frequent, but less severe." Morison finds acute eczema much less severe in negroes, while the chronic form appears

the same as in the white, except that itching is less acute. In answer to the question, "Have you ever seen a case of universal eczema in the negro?" a few of my correspondents have answered in the affirmative. Two of these cases occurred in patients suffering from diabetes.

My table records four cases designated as erythema and erythema hyperæmicum in whites and none in blacks. Erythema multiforme appears twice as common in the white, twenty-one cases being recorded for the former against two for the latter. There are two cases of erythema nodosum in the white and three in the black, and a single case of herpes iris is recorded for each race.

Lichen planus, which from my experience I would have concluded to be fully as frequent in the black as in the white, appears two-thirds as frequent in my figures which show twelve cases in the white and eight in the black. A single case of lichen ruber (the pityriasis rubra pilaris of the French), is recorded as occurring in a negress, no case having been noted in the whites. An illustration showing the papular stage of this rare affection appears in my exhibition of photographs². (Fig. 2.)

A comparative analysis of psoriasis in the two races brings to light some facts that I think are perhaps not generally known. On a number of occasions my father has called attention to the comparative immunity of the negro to psoriasis. At a recent meeting of the British Medical Association, in discussing a paper by Dr. Hyde, he further expressed the view that "possibly the savages of Africa were free from psoriasis on account of exposure of the skin to sunlight, and that the negroes of North America inherited this peculiarity." At the same meeting, Dr. Corlett of Cleveland, stated that he had "never seen psoriasis in the negro, although he had seen many skin diseases in this race." My figures for psoriasis show forty-nine cases in the white and ten in the black. Morison observed twenty-six cases in the white and six in the black, four of the latter cases, however, being mulattoes. Dyer's table gives two cases out of a total of five hundred and fifty-six. Stated proportionally, in ten thousand cases, my figures would have shown two hundred and twenty-two whites and forty-five blacks. Morison's table would have given a hundred and twenty blacks and Dyer's thirty-six. Great as is this disproportion in favor of the blacks, it would certainly have been very much greater if mulattoes could have been eliminated from the

² A photographic exhibition of skin diseases in the negro. Shown at the International Congress of Dermatology.

column of blacks. In his entire experience at Martinique, Rufz stated that he never saw a single case of psoriasis in the negro. The question addressed to my correspondents, "Have you seen many genuine cases of psoriasis in full-blooded negroes?" should in the light of my present knowledge, have read, "Have you ever seen a single case?" With two exceptions, all have answered this question in the negative, many volunteering the information that they had seen no cases. "Once only," writes Dr. Grindon, "in twenty-four years of active dermatological practice have I seen psoriasis in a negro, and then I was not absolutely certain of my diagnosis." Dr. Dyer answers, "I have seen but one case of psoriasis in the negro in fifteen years of practice." Dr. Rosenthal writes, "Classifying all negro descendants as negroes, I have six cases in four hundred and eighty. None of these were in the real black kinky-headed African, but all in mulattoes." Dr. Gilchrist answers, "A few cases," and Dr. Brinkley of Savannah, says, "I have not seen a single case or even a condition suggesting psoriasis." In marked distinction to these answers, is that of Dr. Strobel of Baltimore, who states that he has seen "probably twenty cases." I have been unable to learn what proportion of Dr. Strobel's cases were mulattoes. In Morison's experience, psoriasis, when it does occur, is easily cured and does not relapse.

Twenty-five cases of rosacea in the white to one in the black, constitute a ratio that is indeed striking. One case only is recorded in Dyer's tables, while Morison's table of blacks fails to show a single case. While the beginning stages of rosacea could well pass unnoticed, the same would not be true of the latter, especially the hypertrophic stages. Personal observation of negroes upon the street and in the clinic, leads me to the conclusion that rosacea in the dark race is indeed a rare affection.

Sycosis was seen sixteen times in the whites and nine times in the black. One case was recorded in Dyer's and one in Morison's table. I have observed the tendency to the formation of tiny keloidal tumors in several cases of sycosis in the negro, which is not unusual considering the great tendency to keloid of this race.

Urticaria would appear to be the only inflammatory disease of the skin that is considerably more frequent in the negro than in the white, my figures showing thirty-eight cases in the white and sixty-two in the blacks. Dyer's table, however, shows the small number of two cases, while Morison records eleven whites and seventeen blacks. From my experience, I would not consider urticaria of greater frequency in the negro. I feel sure that it is less severe.

PLATE VII—To Illustrate Dr. Howard Fox's Article.



FIG. 1.



FIG. 2.

PLATE VIII—To Illustrate Dr. Howard Fox's Article.



FIG. 3.



FIG. 4.

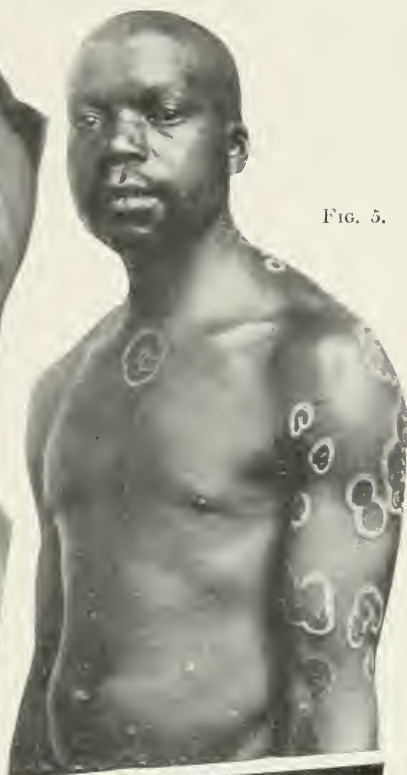


FIG. 5.



FIG. 6.

PLATE IX—To Illustrate Dr. Howard Fox's Article.

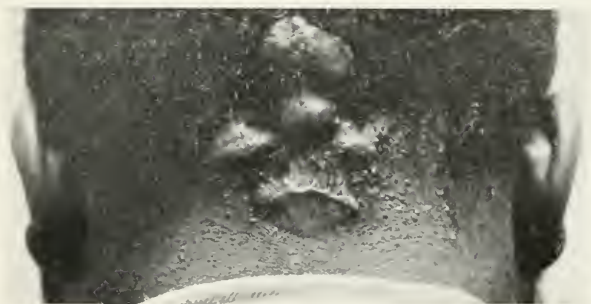


FIG. 7.



FIG. 8.



FIG. 9.



FIG. 10.

PLATE X—To Illustrate Dr. Howard Fox's Article.



FIG. 11.



FIG. 12.

Zoster occurred twenty-eight times among the whites and thirty-one times among the blacks. My experience agrees with Morison's statement, that this affection is less painful in the negro.

A study of tuberculosis of the skin tends to strengthen my view that the negro is less susceptible to skin diseases than the white. From innumerable sources it can be shown that pulmonary tuberculosis, and to a less extent other forms of the disease, are more frequent in the negro than in the white race. In view of these facts it may seem strange that my figures for lupus vulgaris, a typical form of cutaneous tuberculosis, record four cases in the white and only half as many in the black. A glance at my column for negroes shows, however, one case designated as tuberculosis of the nose, two cases of scrofuloderma and one of lichen scrofulosorum. Adding thereto the two cases of lupus, a total of six cases of tuberculous affections in the negro is given. This is partly offset by one case of verruca necrogenica in the white column which brings the white total to five cases of tuberculous disease. These revised figures of six blacks and five whites are very small from which to draw conclusions. It seems to me, however, that in view of the great prevalence of tuberculosis in the negro, there should have been considerably more cases of cutaneous tuberculosis. That there were not, appears further proof of a lessened susceptibility of the negro to diseases of the skin.

(To be concluded.)

DESCRIPTION OF PLATES.

PLATE VII.—FIG. 1. Keloid. Case of Dr. R. J. Devlin of New York.

FIG. 2. Lichen ruber acuminatus.

PLATE VIII.—FIGS. 3 and 4. Hereditary syphilis, showing the annular form. The mother of this child had also manifested syphilitic lesions.

FIGS. 5 and 6. Acquired syphilis, showing the annular form.

Case of Dr. R. B. Carmichael of Washington. Eruption appeared about six months after initial lesion.

PLATE IX.—FIG. 7. Keloid acne.

FIGS. 8 and 9. Leukoplakia buccalis.

FIG. 10. Multiple keloid.

PLATE X.—FIG. 11. Leukonychia.

FIG. 12. Vitiligo.

SOCIETY TRANSACTIONS
THE NEW YORK DERMATOLOGICAL SOCIETY.

352d REGULAR MEETING, NOVEMBER 26, 1907.

DR. E. B. BRONSON, PRESIDENT, IN THE CHAIR.

A Case of Perforating Ulcer of the Foot. Presented by Dr. G. T. JACKSON.

The patient was a man 51 years of age, a widower, who was engaged in railroad work, which required him to be on his feet all day. Both parents died of cancer.

Previous History: Habits, temperate; smokes moderately; no special illnesses. Twelve years ago he froze his right hand. This gave him no trouble until about 6 years ago, when in the winter his hand swelled up and became numb about three times. This was repeated for three winters and then ceased. Has no recollection of freezing his feet. Has had some rheumatic pains. Denies all venereal disease. Three years ago his present trouble began. Two years ago the ulcer was scraped down to the bone and cauterized.

Present condition: The big toe of right foot is swollen and red, and presents on its plantar aspect near its base an ulcer about $\frac{3}{8}$ inch in diameter and $\frac{1}{4}$ inch deep, with a callous edge and of inactive character. The patient complains of sharp lancinating pains in the toe which shoot up the leg. These come on in the fall and are repeated about six times during the winter. His heart and arteries seem to be normal. He has slight tremor of hands. His knee jerks are diminished, the right more than the left. He has a slight ataxia, especially marked on standing on right leg. Right pupil irregular on contraction, but responds well to light. Left pupil does not contract as fully as the right.

Dr. FORDYCE said there was no question about the diagnosis. An examination would probably reveal necrosis of the underlying bone. In the majority of cases of this kind the disease of the bone was one cause of the resistance of the ulcer to ordinary methods of treatment.

Dr. JACKSON, in response to an inquiry as to whether the man had any paraplegic symptoms, replied that there were slight symptoms of locomotor ataxia, especially in the right leg.

A Case of Verrucous Dermatitis. Presented by Dr. G. T. JACKSON.

The patient was a man 30 years old. About 18 months ago he was burned on his left leg with steam. This healed in about 6 weeks. Shortly after its healing the present trouble began as an outbreak of vesicles which broke down and left crusted patches. These have not

been well since. He has a chronic enterocolitis, for which he entered the Presbyterian Hospital. All attempts at cure proving futile, a right lumbocotomy was done, so that the colon might be washed out. When the wound healed the same kind of dermatitis formed about the scar as was seen on the legs. This yielded kindly to a boric acid ointment. The man showed on the left leg a number of patches about 2 inches in diameter which were elevated, sharply circumscribed, with a well-marked border slightly higher than the rest of the patches. About the patches was a seam of inflammation. Inside of the borders the surfaces were warty in character, uneven, and of grayish green color. The patient complained of slight itching and the patches exuded here and there drops of serum or thick pus. While in the hospital the disease was at one time well under control. He left the hospital and came back in as bad a condition as before. Since then X-rays have been tried, but they seemed to make matters worse.

Dr. KLOTZ suggested the use of applications of some astringent twice a day—a plaster of strong salicylate, together with the wearing of a rubber bandage during the day.

Dr. FORDYCE said the case apparently belonged to the group described under the title of dermatitis vegetans. The case which was demonstrated by Dr. Jackson showed in a minor degree the features which were present in a case reported by Dr. Gottheil and himself about a year ago, in which similar lesions followed a dermatitis herpetiformis. In this case there was a considerable amount of epidermic hyperplasia containing numerous miliary abscesses, each of which was filled with a large percentage of eosinophile cells. The process was autoinoculable and spread by continuity of tissue, and by means of the clothing and finger nails. The culture showed only the ordinary pus organisms, with the staphylococcus aureus predominating. He had seen other cases following dermatitis herpetiformis, leg ulcers, eczemas, etc. It was probable, in his opinion, that the pyogenic organisms were the essential etiological factors acting on a vulnerable or susceptible skin.

In response to an inquiry from Dr. Bronson as to how long the condition had existed, Dr. Jackson replied that he had observed the case for seven months. The patient had come into the hospital on account of his general condition, and he had noted the eruption. He had a very badly nourished skin.

Dr. BRONSON suggested that a thorough curettage under general anaesthesia would be a good preliminary treatment.

Dr. JACKSON said that the lesion had healed almost entirely under rest and a rubber bandage, but when the man got out again on his feet the conditions returned. This particular form of dermatitis he had seen only in people in poor health. This patient was much reduced by his entero-colitis.

Necrotizing Chilblain(?) Presented by Dr. H. H. WHITEHOUSE.

Young man, aged 20. Family history negative. The eruption is of five weeks duration, and is confined to the backs of the hands and fingers, extensors of forearms, and around the rim of each ear. He had a similar attack last winter, which disappeared, leaving superficial scars and a slightly notched condition of the ears. The eruption consists of small indolent nodules, discrete, rounded, dull red in color, with a small de-

pression on their summits. In some, upon removal of a small crust which forms at the apex, there is exposed a loss of tissue with sharply cut outline and perpendicular walls. There is neither itching nor soreness, but the ears are red, hot, and burning beyond the affected rims. When the case was first seen a week ago, one nodule on the finger had enlarged to the size of a small marble and was capped by a black circular necrosed crust, $\frac{1}{8}$ inch in diameter, but there was no pain nor sensitiveness. It opened and discharged under a salve given by a druggist, and is now subsiding; evidently the lesion had become infected. The peripheral circulation is distinctly impaired, the hands showing evidence of vaso-motor stasis, and the tips of the ears are of a bluish red color. Neither the hands nor the ears, however, have ever been frostbitten, nor has the patient suffered from the symptoms of chilblains.

While the life-history and some of the clinical features are suggestive of multiform erythema, the case is interesting on account of its peculiar localization and the presence of necrosis and scarring. The presenter would like to enter the query whether the diagnosis of necrotizing chilblain could be entertained in the absence of the usual distinctive subjective symptoms of pernio?

Dr. ROBINSON suggested that it might be a tuberculide, but did not care to make a diagnosis without further study of the case.

Dr. MORROW thought it looked more like chilblains than anything else. The fact that there was no definite history of the parts being frozen did not contraindicate the diagnosis.

Dr. FORDYCE said, in his opinion, it belonged to the tuberculide group, as most of the individual lesions were typical.

Dr. WINFIELD thought it might be a necrotic granuloma, although the ear looked decidedly like pernio. He thought that further study of the case, and possibly a microscopic examination, would be required to establish the diagnosis.

Dr. DADE said the ears appeared to him like ordinary chilblains. The lesions on the hands looked like those described as folliclis.

Dr. JACKSON said that the case presented the same appearance as one that Dr. Allen showed before the Society a few years ago, a young man who lived out-of-doors most of the year. Every winter he had the same kind of lesion on his hands that this case presents. The conclusion then reached was that necrotizing chilblains was a proper name for it. Both patients appear to have the chilblain diathesis. The fact that the lesions only appear in the winter is against the tuberculide theory, for tuberculides would appear in the summer as well as the winter.

Dr. MORROW said that the rapid involution and cicatrization of the lesions does not correspond to the history of necrotic granuloma.

Dr. WHITEHOUSE responded that in necrotic granuloma the individual nodules go through a cycle of several weeks' duration from the time they appear to the time of necrosing. After necrosis begins they resolve rather rapidly; while they sink down and recrudescence quite promptly, the growth of the nodule is very slow.

Dr. WHITEHOUSE said that when he first examined the case over a week ago he had made a tentative diagnosis, from the lesions on the fingers, of tuberculide or necrotic granuloma from the appearance of the nodules themselves, but upon a more careful study of the case,—considering the peculiarity of the localization on

the tips of the ears, and the short duration of the cycle of development of the individual lesion, and its appearance only in the winter time,—he was inclined to think that the peripheral circulation was a contributing factor in the etiology, and was therefore about willing to withdraw his former diagnosis of necrotic granuloma or tuberculide. When he had spoken of the man's having no subjective symptoms of chilblains, he meant that he had had no tingling, burning, or erythematous area, such as are seen in connection with ordinary chilblains, which usually appear independent of any freezing or the parts having been touched by frost. At the tip of each lesion there is a crust, and when this was taken off from a lesion on the edge of the ear a sharply cut excavated ulcer was revealed—yet within a week, without any other treatment than rhubarb and soda internally, this sharply cut ulceration had healed and almost disappeared, leaving only a partial cicatrix. In consequence of the life history of each individual nodule being so acute and short-lived, and this fact, considered in connection with the other characteristics mentioned in the case, impressed him as being a peculiar type of necrotizing chilblains. He very much questioned if there was any tuberculide element in it.

Regarding the differential diagnosis of necrotizing chilblains and the so-called tuberculides. Dr. Fordyce did not think the two conditions could be differentiated by the rapid or slow evolution of the lesions, as with the same etiological factor we may have an acute or chronic condition depending on the activity of the agent producing the disease or the resisting powers of the tissues.

Dr. BROXSON said that he had never seen such punctate lesions occurring in chilblains.

Dr. WHITEHOUSE replied that it was not usual, and that seems to constitute the peculiarity of this case.

Dr. FORDYCE said he had under observation a similar case of necrotizing granuloma persisting for years. He had cut out one of the lesions and there was a distinct fibrous growth. It looked as though there was some toxin eliminated by the sweat, as the process apparently took its origin about the coil.

Dr. WHITEHOUSE said that one matter which he had not dwelt upon was the scarring in relation to its being a tuberculide. The scars on the forearm are rather superficial and flat—they are only slightly excavated, and are not deep or pitted like the scar found in the usual type of tuberculide.

In response to a query from Dr. MORROW as to whether the spontaneous disappearance of the lesions corresponded with his idea of the tuberculide, Dr. Fordyce replied in the affirmative.

Dr. DADE called it *lupus verrucosus*.

Dr. FORDYCE suggested *lupus vulgaris* with certain verrucose lesions.

Dr. KLOTZ agreed with the diagnosis of *lupus vulgaris*. The lesions have not the well defined outlines of *tuberculosis verrucosa cutis*.

Dr. MORROW preferred to call it *lupus vulgaris*. The lesions are not pronouncedly verrucose, and the verrucose element noted might be to a certain degree determined by their localization.

Dr. ROBINSON suggested that it might belong to the tuberculous *lupus vulgaris* variety in which there is a certain amount of verrucose growth, but not to the typical verrucose *lupus*, for here you see the nodules deep in the skin, which is not the case in the ordinary tuberculous type.

Dr. WHITEHOUSE said that it appeared to be a tuberculosis, and he had favored that diagnosis when he presented the case, but did not feel inclined to place it in the category of *tuberculosis verrucosa*. The crusts which to-night looked verrucose, in the day appeared flat and laminated. The point which Dr. Robinson had made of the different nodules forming patches was well taken. While considering it a tuberculosis of the skin, after studying all the characteristics of the lesions he had not felt inclined to regard it as *tuberculosis verrucosa*.

of Reihl and Paltauf. The cases of disseminated tuberculosis that he had seen following measles had lesions in the form of small nodules, and not in large patches as in this case.

Case for Diagnosis. Presented by Dr. H. H. WHITEHOUSE.

Charles McG., aged 7; a fairly well nourished boy in good general health. Father living and well; mother died two years ago of heart trouble and bronchitis. No history of tuberculosis or syphilis in immediate family or family of either parent. Patient is oldest of three children, one of whom died of measles two years ago. The other is living and well, five years of age. There were no miscarriages. The present eruption followed the measles $1\frac{1}{2}$ years ago, beginning as a papule on the back of the left hand. This increased in size, others developing around it, forming a patch $\frac{1}{2}$ an inch in diameter. Other smaller and larger patches developed in the same manner, to the number of five or six on both forearms, chiefly on their extensor surfaces, but only one extending above the elbow. There is an ill-defined patch in one palm, a patch on each knee and one on the foot. There are no subjective symptoms, the lesions being neither sore nor painful, and are free from itching. There is slight submaxillary and cervical adenopathy.

The patches are from one-half to one inch in diameter, irregularly circular, oval, or partially crescentic in outline, raised $\frac{1}{8}$ inch above the surface, dull-red in color, and covered in places with thick laminated adherent crusts. Upon removal of these, small bleeding depressions are revealed, but no distinct well-defined ulceration. There is no evidence or history of pustulation, and while the patches have a rather uniform, flat surface, they are apparently made up of individual large papules or small tubercles. Pressure with a glass reveals a translucency suggestive of tuberculosis.

Epithelioma of the Nose and Cheek. Presented by Dr. ROBINSON.

Case of epithelioma occupying the greater part of the left cheek, left side of nose and inner canthus region. Commenced 15 months ago near canthus. Is a rapidly spreading cancer. Treatment to be followed is first caustic potash in paste form to remove a large part of the cancer mass and then an arsenious acid paste for destruction of the peripheral pathological tissue. The case will be difficult to cure, but such measures seem to him to be the only ones available. Excision is out of the question.

Dr. MORROW said that he hoped Dr. Robinson would succeed in getting a good result, and that he would like to see the case again at the next meeting. He had always found caustic potash a very difficult application to control, as one cannot regulate the depth and extent of its destructive action so well as that of other caustics. Another objection is that the pain is considerable. According to his experience, chloride of zinc, either in solution or combined with other agents in the form of a plaster, is the most manageable and dependable application that can be used. He had treated cases of epithelioma on this theory for

25 years, and still clings to it as the preferential agent when a caustic application is indicated.

Dr. JACKSON said that he had recently treated a case with arsenical paste mixed with orthoform, with no pain whatever, though the paste was left on for eight hours; but about the third day the patient began to have a temperature, which went up to 101° in the morning, falling to 100° at night. She did not feel ill, and had apparently no symptom of arsenical poisoning.

Dr. ROBINSON said that he had simply showed the case in order to give the line of treatment in this particular case, and to show the difference between the real size and the apparent size of the lesion. The surgeon scarcely ever gets in far enough, and the disease reappears. As regards the application he does not ordinarily use caustic potash, but he began with this on the lower part of the cheek and got off very large masses in a very short time. The application was not made for more than 20 minutes. He had seen it used as long as 10 minutes without pain. Although it is not so easily controlled as arsenious acid or some of the other acids, he did not believe that a case like this could be successfully treated with any caustic that will act in the manner of chloride of zinc, giving dry necrosis. He depended rather on getting a sero-tactic action so that the part will be filled with serum and get an action beyond the part that will be completely necrotized. Potash and arsenious acid will do that, but you get a greater destruction with potash, though you have to be careful. He used the potash to get the large masses off, and lower down he used the arsenious acid, and left it on long enough to get a very destructive effect. You cannot get a good result without a great deal of swelling. Depend upon the inflammatory action as well as the necrotic action and the special reaction from the agent. He would be glad to show the case again later.

As regards the rise in temperature, he had never made any observations, so he could not say anything on that point. He had, however, never seen any ill effects from it in the many times he had used it.

Had the patient been a private one perhaps he would have used chloride of zinc. He uses that in the office to destroy large masses and afterwards cuts off the mass easily. So far as the question of pain is concerned, he does not object to that. Anything that helps to intensify the inflammatory process is desirable.

Dr. MONROE said that he can get all the inflammatory action desired with chloride of zinc. It depends upon the thickness of the patch and the duration of the application. Arsenic, if used sufficiently strong, would affect the healthy tissues. Its so-called elective action upon diseased tissue is no more pronounced than that of certain other agents.

Dr. ROBINSON said that he had had a case in which there were quite a number of epitheliomatous areas, but only a few that were recognized objectively. He had applied arsenious acid paste over the whole cheek and had a photograph taken afterward showing where it had picked out every epitheliomatous area. That is a clear proof of elective action. Caustic potash will do the same thing if used in a diluted form. The destructive action is greater in pathological tissue than in normal tissue. He did not think the patient's eye would be lost. He had had a case some time ago which recovered with a perfect canthus, although the disease had already invaded it.

Case for Diagnosis. Presented by Dr. G. T. JACKSON.

Woman of middle age. This lesion has been present for about a year. She states that at first it itched a great deal, but has not spread since it first appeared. The lesions appear chiefly on the legs over the shins and thigh. In the hollow of each hip there is a patch with a lot of little

spinous processes. On the legs the lesions are isolated and in streaks. They are primarily red papules located in the follicles of the skin. Here and there are some flat papules of the lichen planus type. There is a distinct roughness of the skin of the affected parts.

Dr. ROBINSON said that it was certainly an unusual and very interesting case. While some of the lesions on the leg looked like lichen planus, there were not many such. One often sees follicular lesions of the extremities very much like lichen planus, but if watched carefully one will see that it is of short duration, whereas lichen planus will go on for months. Taking all the lesions under consideration, however, he could not make a diagnosis of lichen planus here, for the follicular keratotic condition is very marked. There are quite large areas with the spinous processes. It is not in the right place for pityriasis pilaris. The lesions on the leg are larger than would be found with that trouble. It was not the keratosis pilaris follicularis of Brooke, although it comes nearest to that, and he would call it that if anything, although there seems to be too much redness and inflammation for that disease.

Dr. MORROW thought it a case of lichen planus. The objective characters of lichen planus are so extremely diversified and embrace so many features that do not correspond in every point to the typical picture, that it would be perfectly safe to include this case under that category. It certainly is not a case of lichen rubra, or the lichen pilaris of Devergie. Some of the lesions below the knee and on the thigh were so characteristic of lichen planus, though perhaps not quite so angular in outline, that he would not hesitate to call it lichen planus. The keratotic condition is rather unusual, but then unusual features are often seen in lichen planus.

Dr. KLOTZ agreed that it seemed to have many of the features of lichen planus, but it has not the bluish color nor the firm induration usually seen in lichen planus of so long duration.

Dr. FORNYCE said the case was a rare one, and it was difficult to place it in any well-defined group of skin diseases. All of the lesions, in his opinion, were of the same nature. On account of the follicular seat of the lesions he would rule out the diagnosis of lichen planus, although some of the scattered non-follicular papules strongly suggested that diagnosis.

Dr. DADE thought there were two distinct diseases present—the lesions along the front of the legs he took to be plaques of lichen planus becoming hypertrophied and warty; there were papules of undoubted lichen planus higher up near the knee. The intense itching the woman complained of when seen at the clinic would be in accord with this view. The group of papules on both hips and along the borders of the popliteal spaces he took to be the *lichen pilaris* of Crocker, and which Crocker speaks of as occurring in just these regions, associated with lichen planus. Each of these papules has a distinct horny spine protruding from it, and the hand receives the characteristic nutmeg grater sensation when passed over the lesions. There is none of this feeling when the hand is passed over the line of lesions running up the front of the legs. Dr. Jackson is perhaps thinking of keratosis pilaris when he says these papules are too red. *Lichen pilaris* of Crocker is a distinctly inflammatory disease, and the papules are red at first, and only become paler and near the color of the skin after they have existed for some time.

Dr. WHITEHOUSE said that he had nothing to add to the suggestions that had been made. All had observed the two distinct types of lesions—one a follicular keratosis and the other a lichen planus type. As Dr. Robinson had remarked, there are so many eczemas, etc., where the angular flattopped papules exist, that such lesions do not necessarily constitute a lichen planus. Most of the lesions

are follicular, and he was inclined to consider it a lichen pilaris, with secondary plane lesions, but not necessarily an accompanying lichen planus.

Dr. JACKSON said that he did not think it was lichen planus. The presence of a few flat papules does not establish that diagnosis. The color was not that generally seen in lichen planus. He thought that there was only one disease. Over the shins the skin is very rough—almost as rough as in the hollow places of the thigh, where the little spines are found. At first he had thought of lichen pilaris of Crocker, but was inclined now to call it keratosis follicularis, though it was not a typical case.

Epithelioma Successfully Treated by X-Ray. Presented by Dr. J. A. FORDYCE.

The patient was a woman about 45. She had had an epithelioma of the upper lip extending to the angle of the mouth and lower lip which had existed for 16 years. It was probably of the rodent ulcer type and was of considerable interest on account of the rarity of epithelioma of the lip in women. The lesion had responded rapidly to X-Ray treatment, as after 14 exposures, 6 of 3 minutes' duration and 8 of 5 minutes' duration, the ulcer had healed, the infiltrated margin had disappeared and nothing was left excepting a small nodule embedded in the lip at the extreme right of the lesion. This nodule had evidently not been included in the area treated by X-ray.

Dr. ROBINSON said that it certainly was a most excellent result. In his case he did not think the X-ray would give such a good result. It was entirely different in its origin and the etiological factors were probably different. In my own case, after I get the tissues well injured by the caustics I expect to use the X-ray, but not otherwise, for the growth is too rapid to expect much from the X-ray treatment. It is in the slow superficial growths and rodent type where it is most useful. In Dr. Fordyce's case there was still a little of the growth in the corner. This is deep-seated and covered with apparently normal epithelium, and I doubt if the X-ray will prove effective in that part.

Dr. WHITEHOUSE said that as far as it had gone the case furnished one of the best results from the X-ray that he had seen. He would like to ask if the nodule remaining in the right corner of the mouth would militate against the characterization of the whole process as a rodent ulcer—whether such a lesion would be expected in connection with a rodent ulcer, and whether it would be expected that this part still remaining will yield to the X-ray as the rest had done? He was inclined to think that it would not.

Dr. JACKSON said that a cure in 14 exposures is very rapid indeed. In his experience it had usually taken many more.

Dr. FORDYCE, replying to the remarks in regard to the nodule, said that in his opinion it would not yield rapidly to X-ray treatment. The simplest way to get rid of it would be to excise it. He regarded the original growth as a rodent ulcer on account of the primary involvement of the skin at a distance from the muco-cutaneous juncture. Many surprises were met with in treating epitheliomas by the X-ray. He had now a patient under observation whom he had treated for a number of years for rodent ulcer of the inner canthus. At first the lesion yielded very quickly, but after a number of months it returned, then yielded and again relapsed. Each relapse was more severe than the original condition. Now he had an extensive ulceration involving the skin about the orbit which has practically destroyed the eye. It would seem that in such cases the continued use of

the X-ray renders the tissue more vulnerable to carcinomatous invasion; in other words, that the epithelioma becomes more malignant after the X-ray is pushed too far. The efficacy of X-ray in preventing a recurrence of epithelioma would seem to him of doubtful value. It has its special indications in epitheliomas of very superficial extent.

Case of Parasitic Dermatitis, Resembling a Syphilide Presented by Dr.

A. R. ROBINSON for Dr. ORLEMAN ROBINSON.

A woman, aged 40 years, with slight seborrhœal eczema of scalp, pediculosis capitis, and an eruption on the neck. On account of the resemblance at first sight to a papular syphilide, the case was shown. The lesions were pea sized, sharply limited, reddish in color, elevated like a papular syphilide and markedly grouped. There were about 20 lesions on each half of the neck. A few scattered lesions were present on the rest of the body. There is no history of syphilis. I have seen cases with some resemblance to this one in connection with pediculosis capitis in elderly persons.

Dr. KLOTZ said that the peculiarity of the lesion suggested that some contamination might have taken place by some application to the throat, possibly a simple wet dressing. The neck is very rarely affected by such an eruption.

Dr. ROBINSON said that he had shown the case on account of its unusual character. A close examination in the day time shows a peculiar condition. A serous transudation has evidently taken place into the epidermis and broken up the cells. In other words, there seems to be an eczematous process. She has some seborrhœa of the scalp, and has pediculosis. He had excluded ringworm. He was satisfied that if Unna saw this case he would put it in his class of seborrhœal eczema. He himself was inclined to call it an eczema of parasitic origin, but not an eczema seborrhoicum.

Dr. WHITTEHOUSE said that the lesions seemed to be very indefinite and difficult to diagnose. She seems to have no seborrhœa in the scalp to speak of. Dr. Robinson had spoken of it as being of a distinctive catarrhal type. He did not feel inclined to put it in the category of a seborrhœic dermatitis, but would not care to pronounce an opinion upon its exact nature without further observation of the case.

Dr. DADE said he would hardly call it a dermatitis seborrhœa, if that is what Dr. Robinson means when he speaks of it as being a seborrhœal eczema. The scalp is perfectly clean and free of scales, and the lesions themselves too red and too free from greasy scales to warrant this diagnosis. The spots in a group confined almost to the left side of the neck look pretty much as if self-inflicted.

Case of Atrophy and Deformities of the Extremities Following Universal Scleroderma. Presented by Dr. FORDYCE.

The patient was a young man 25 years old, a native of Ireland, who had been presented on two former occasions by members of this Society, when certain doubts had been expressed as to the exact nature of his malady. About 12 years ago the patient stated that he had swelling and rigidity of the extremities and face. About that time he was seen by Dr. Crocker of London, who made a diagnosis of generalized scleroderma. After a number of years the thickening of the skin over

the extremities was followed by atrophy and contractures of the fingers and toes. At the present time the skin of the lower extremities was somewhat thickened.

Dr. ROBINSON said that he did not regard it as a pure case of scleroderma. He had observed it for a good many months. The case had been shown before at this Society both by Dr. Fox and himself. Crocker, who saw the case first, regarded it, according to the patient, as an unusual case of scleroderma, on account of the commencement as a diffuse œdema.

While in the hospital a biopsy was made by the pathologist. He failed to find any evidence of tuberculosis, or blastomycetic dermatitis. The latter was specially looked for.

The patient was presented for suggestion as to treatment as well as for an opinion as to the etiology of the affection.

Dr. ROBINSON suggested that anti-parasitic applications and astringents would be the proper treatment.

Dr. JACKSON replied that they had tried boric acid, tar, and salicylic acid. Nothing seemed to do any good but keeping quiet and snug bandaging.

Dr. ROBINSON said there seemed to be some pyogenic organism present, probably staphylococci. Anti-parasitic agents with bandaging seemed to help some. He generally found white precipitate ointment the best application. Most of these cases require attention to the ground, as tonics, etc.

MANHATTAN DERMATOLOGICAL SOCIETY.

59th REGULAR MEETING, APRIL 5, 1907.

DR. EDWARD PISKO, PRESIDING.

Tuberculosis Cutis. By Dr. ROBERT ABRAHAMS.

Female, 10 years old; tubercular family history. When 7 years old mother noticed some "swellings" on both legs, which increased in size and finally broke open. After a month or two these finally healed, but the skin over the places never seemed natural. At the present time, with the exception of some seborrhœa and the usual pediculosis of the scalp, there are no cutaneous lesions anywhere above the thighs. On both of these latter there are irregular, thickened, purplish patches, with roughened surfaces and markedly raised above the surrounding structures. The margins of each of them is sharp and well defined, and they are soft and doughy to the touch. On the legs are seven similar patches with fairly deep ulcerations occupying their centers or the greater part of their areas.

The ulcerations are irregular, with markedly undermined edges with a dirty brown and yellowish serous exudation, or in some places yellowish, readily detachable crusts. Scattered amongst these developed lesions are small indurated painful inflammatory lesions, with distinct beginning necrotic areas in their centers. These nodules are to be regarded as the initial lesions, which later go on to form the ulcerations and terminate in the bluish, doughy, elevated masses above mentioned. The subjective symptoms are limited to moderate discomfort and some pain. The

patient has been under treatment of various kinds ever since she has had the affection without, however, any benefit.

In the discussion most of those present considered the lesions due to secondary pyogenic infection (Ecthymata) in a case of chronic urticaria. Some lesions of this latter type were present at the time of presentation, but the president stated that they were the first of the kind he had seen, though the patient had been under observation for some time.

Acne Keratosa. By Dr. W. S. GOTTHEIL.

Ida P., 11, Russian, here 5 months. Has suffered from the eruption since infancy; it has varied in severity at times, but has never entirely disappeared. Individual lesions last a long time (weeks or months), and then dry up, their hard tops fall off, and occasionally leaving a mark. General health fair, internal organs free. History defective, the child being an orphan.

Scattered over the body are several hundred lesions, grouped in certain localities, and identical in appearance though varying in size. The smallest are less than a pin-head in size; the largest as big as a French pea. They are circular acuminate papules of a dull red color, on a normal skin base, and with a hard, yellowish brown plug in their center. The largest papules tend to become irregularly circular or oval; and the central plug is large and hard. Even the smallest papules show this central plug, removal of which leaves a cup-shaped glistening depression, and usually there is no pus. A characteristic feature is the formation of a lesion of precisely similar character, with reddened base and central hard plug, wherever there have been accidental lesions, such as scratches; these lesions assuming the elongated or irregular shape of the traumatism.

The eruption is fairly well distributed over the body, but the papules are distinctly grouped in certain places. The larger collection of them is on the upper buttocks on both sides, where there are a hundred or two, mostly small in size. There are a fair number on the outer surface of the thighs and some on the lower legs, especially about the ankles. The center of the back is free, but the shoulders and the skin over the shoulder blades show large groups of lesions. There are a few on the upper anterior chest area, and more of them on the lower abdomen. The arms are markedly affected, especially the extensor surfaces; there are some on the flexor aspects, and many on both surfaces of the wrists; there are a large number of characteristic lesions on the back of the hands. There are a few scattered over the face, as well as some scars that may have been the result of previous, possibly infected lesions. Palms, soles and the scalp are free.

In 1904 I described two cases of this affection, which is identical with the acne cornée of Hardy, and Leloir and Vidal, the acne keratique of Leredde and Tencson, and possibly the keratosis follicularis contagiosa of Brooke. It differs from the ordinary lichen pilaris or spinu-

losus in that the hyperkeratosis affects the sebaceous glands proper rather than the hair follicles, and that the chronic inflammatory process is much more marked than in the pilous affection. In fact the microscopic examination in my earlier cases showed that the excretory ducts of the sebaceous glands were chiefly affected; the distended duct forming a sack that was pointed below and broad crateriform and filled with masses of imperfectly cornified epithelial cells above. The sebaceous cells of the secreting portion of the cells below were compressed and atrophic.

The chronic inflammatory process affecting the sebaceous glands seems to be more nearly related to an acne than to a pure keratosis; and it may be related also to the so-called cutaneous horns. In one of my earlier cases, at all events, the keratotic plugs at one or two places formed distinct though minute horny excrescences. Future study must decide whether it has any connection with acne necrotica or the tuberculides.

In the discussion Dr. Weiss drew attention to the fact that this affection had been given many names, of which he personally preferred that of keratosis follicularis. The reporter noted that some cases that resembled this one in all essentials had lately been described in the *British Journal of Dermatology* as lichen spinulosus. It was interesting to note that the occurrence of these glandular inflammations with the formation of keratotic plugs seemed to be a matter of congenital predisposition. In this case, as in the other previously recorded, a scratch or other irritation would bring out similar lesions; so that a row of inflamed glands with plugs always resulted in the formation of a row or group of lesions. The treatment had consisted of curetting the lesions and the subsequent application of a bland ointment. Dr. Cocks recommended the X-ray, under which he had seen several cases markedly improved.

Case for Diagnosis. By Dr. M. B. PAROUNAGIAN.

Mrs. M. D., American, age 30, married.

Family History: Father died of pneumonia at the age of 50, mother died of uterine cancer at 45, one brother and sister living and both in good health.

Personal History: Married 6 years, no family, has never been pregnant, menstruation regular, no history of lues. She states, she has always been well and never had occasion to consult a physician, though, she has slight cough.

Present Condition: Started about a year ago, in the form of a small purplish discoloration or "spot" as she calls it; on the forehead about $\frac{1}{2}$ inch above the left eyebrow, two more spots appeared almost forming a triangle. They disappeared some time later and new lesions appeared at about the same region, the next lesion appeared on the right cheek about an inch from the outer edge of the right eye, this was about last September or October, 1906, this lesion, which she also describes as purplish discoloration, grew larger and larger, extending downwards, covering an area of about 2 x 2 inches. When I first saw the case at the Post-Graduate on Feb. 27th, 1907, the base of the lesion was quite red and angry looking, scattered all through, with large nodes and nodules, some hard and some soft, somewhat scaly. There is another lesion on

the left side at the angle of the jaw, which is a distinct nodule, quite hard; the lesions are not painful, only upon pressure, no other lesions on the body, mouth or throat, the inguinal lymphatics are enlarged. She improved somewhat under mixed treatment and islands of apparently healed areas are quite noticeable.

Dr. Oulmann regarded the case as one of *acne indurata*, on account of the persistent, deep-seated nodules, as did Drs. Cocks, Bowman, and Abrahams. Dr. Weiss regarded it as a case of tubercular infection, a *lupus tumidus*, diascopy showing what he considered to be distinct nodules. Dr. Oberndorfer concurred, noting its resemblance to the *gommes scrofuleuses* of the French writers. Dr. Pisko regarded the lesions as those of a tubercular syphiloderm. Dr. Geyser was in the habit of using the X-ray as test in doubtful cases; if the lesions were tubercular they were benefited; if they were syphilitic they got worse. Dr. Parounagian, in closing, said that the large, indurated, non-suppurating lesions were not characteristic of *acne*. She has had one raying, which had aggravated the condition. On the other hand, the patient was considerably improved by mixed treatment, which she took for a month. He is therefore inclined to regard the case as one of tertiary syphilis.

Carcinoma Linguae. By Dr. L. OULMANN.

R. R., 66, noticed 6 months ago a swelling in the right side of his tongue, which extends in time upon the mucosa of the base of the mouth and the wall of the maxilla on that side. The submaxillary glands became affected. Three months ago the anterior third of the right side of the tongue was removed, with the floor of the mouth and the submaxillary and other neighboring glands, after the extraction of the lower teeth of that side. Three weeks after the operation the patient noticed that his tongue had begun to swell up again; there was much pain, and he was unable to speak distinctly.

Status Præsens: The right side of the tongue is shorter than the left, and it contains a hard, walnut-sized tumor and is adherent to the lower maxilla and the floor of the mouth. From the outside of the jaw the tense infiltration of the whole floor of the mouth can be plainly felt. No glands. There are also two excrescences of the mucosa over the affected area, one of which is soft, partly ulcerated and bleeds easily and other harder and less vulnerable.

Benign Papilloma of the Tongue Coincident with Extensive Leukoplakia.

By Dr. L. WEISS.

B. L., male, 40; no history of syphilis. Five or six years ago, after excessive smoking, noticed fissures of the tongue, which disappeared with the discontinuance of his tobacco, but his tongue has always remained sensitive to the effect of that irritant. Four months ago began to have pain in the region of the inferior maxilla and a small nodule appeared along the right border of the tongue; this soon became larger, until now it is the size of a 5 cent piece. The mass is hard, circular, elevated about one-quarter of an inch above the general surface of the tongue; there is no induration of the base of the tumor or of the tissues

of the tongue itself. There are several patches of characteristic leukoplakia on the surface of the tongue, but nothing of the kind at the site of the lesion described. Although the relationship of leukoplakia and carcinoma is well established, and some forms of malignant growth are distinctly papillomatous, the character of the growth in this case and the fact that the leukoplastic patches though near, are entirely distinct from it, justifies the diagnosis of a benign papillomatous growth.

Chronic Dermatitis with Commencing Atrophy. By Dr. L. WEISS.

Mrs. B., Austrian, 45; excellent general health. Her ailment dates back two years and affects the hands alone; she attributes it to exposure to fire and stoves incidental to her occupation of cook. She states that her trouble began with the appearance of small purplish areas on the backs of her hands. These have been spreading peripherically ever since; until at the present time the entire skin of the backs of the hands, from the tips of the fingers to the wrists are affected. These areas are purplish in color, and with an integument of extreme thinness; so much so that it resembles crumpled up cigarette paper. The upper margins of the affected areas are extremely well defined, so that there is a distinct line beyond which the skin is entirely normal.

The case was generally regarded as one of a chronic low grade dermatitis, possibly the preliminary stage of an atrophy.

Case for Diagnosis. By Dr. B. F. OCHS.

L. K., 24. Three years ago had a "ringworm" of the body, treated with Tr. of iodine; at the same time she noticed that the nail of her left little finger became yellowish in color and began to crack easily. At the present time she has an acne and a well-marked pityriasis versicolor of the chest. The condition of her nails is as follows: left hand, thumb nail normal; index finger nail spoon shape, yellowish and studded with white spots. The middle finger nail has a depressed whitish furrow running across its middle; and the other two nails of that hand are ridged and present a worm-eaten appearance. All the nails are thickened and break off easily in a lamellar manner. Right hand: nails all more or less affected in similar manner to the left, but less markedly so. Nails of the feet unaffected. Examination of the scrapings and fragments of the affected nails has not revealed the presence of fungi. In spite of that fact, however, the speaker is inclined to consider the affection as parasitic. It presents none of the characters of syphilitic nail disease and a vigorous course of antileptic treatment has no effect on it. Psoriasis has been considered, but there is absolutely not a single lesion of the disease anywhere else on the skin. In the discussion that ensued the general opinion was that the affection was probably parasitic.

M. B. PAROUNAGIAN, M. D., Secretary.

REVIEW

of

DERMATOLOGY AND SYPHILIS

Under the charge of A. D. MEWBORN, M. D.

Radiotherapy and Phototherapy.

By G. H. STOVER, M. D., Denver, Col.

Value of the High Frequency Spark as a Local Application. REGINALD MORTON, *Lancet*, June 1, 1907. In the treatment of alopecia areata Dr. Morton applies a resonator current through a vacuum tube until erythema is produced, and states that success with this method is in direct proportion with the readiness with which the erythema can be brought about. He finds that the application of the resonator spark directly from a metallic electrode causes the disappearance of acne papules after half a dozen treatments. In his treatment of port wine marks by this method a hot, white, resonator spark is applied for several minutes until the surface has a vesicated appearance; in about eight days desquamation occurs, leaving a normal skin surface.

Phototherapy. SCHAMBERG, *Jour. A. M. A.*, Vol. XLIX, p. 549, in a valuable paper, after a consideration of the subject in general, including a description of several forms of apparatus, relates a number of cases treated by him with the mercury vapor lamp, and states as his conclusions that the mercury vapor lamp is capable of accomplishing good in alopecia areata, leg ulcers and certain forms of eczema.

Acne and Chronic Eczema. RUSSELL H. BOGGS, *Jour. A. M. A.*, Vol. XLIX, p. 735. This writer is convinced of the value of Roentgen therapy in the conditions named; he prefers a soft tube, as a rule at a distance of about ten inches from the skin; in the milder cases of acne the ordinary methods of treatment are first used; if not successful he proceeds with Roentgentherapy; in pustular and indurated acne the Roentgen ray is applied at once without wasting time over other methods. He does not use Roetgentherapy in acute eczema except for the relief of excessive pruritus; he finds his best result in squamous eczema.

Superficial Malignancies, *Calif. State Jour. Med.* Aug. 1907. Soiland illustrates his article on the use of the Roentgen ray in superficial malignancies with some very convincing reproductions of photographs.

At the the July, 1907, meeting of the Electrical Section of the British Medical Association, Dr. James Taylor, of Bristol, reported a case of Paget's Disease in which the superficial ulceration healed readily under Roentgen therapy, but during treatment a malignant mass developed in the substance of the breast, necessitating the removal of the organ.

Electrical Treatment of Pruritus of the Vulva and Anus, *La Clinique*, May 17, 1907, Noiré states that a very few applications of the Roentgen ray have been successful in his hands, where the use of static and high frequency currents had failed. The applications are made at ten-day intervals.

Enlargement of Vessels Resulting from Exposure to Roentgen Rays. AXMANN, *Munch. Med. Woch.*, Vol. LIV, No. 38, states that energetic exposure to ultra-violet light will remove the telangiectases resulting from prolonged radium therapy. This is perhaps in line with the experience of certain radiotherapeutists who believe that they are able to minimize the danger of dermatitis after Roentgen therapy by making frequent applications of arc light to irradiated areas.

The Protection of the Roentgenologist. *N. Y. M. J.*, Vol. LXXXVI, No. 20. Dr. C. L. Leonard. This conservatively written paper brings out in an impressive manner the dangers that many roentgenologists are thoughtlessly undergoing, and carefully considers the methods used for avoiding these dangers. The conclusions he arrives at are here given:

1. That much of the seriousness of Roentgen operators' lesions has been due to meddlesome surgery and medication.

2. That this has resulted from an inappreciation of the character of these lesions.

3. That their course and clinical character, as well as experiment, have shown that they are due to injury to trophic nerve, decreased nutrition and blood supply.

4. That the area involved extends wide of the visible lesion and hence reparative processes cannot follow local surgical interference or stimulant medication.

5. That the first principle of treatment is to avoid all further depression and injury to local nutrition, and increase systemic tone.

6. That the best local treatment is to let the lesions alone and protect them from further irritation.

7. That the best treatment is prophylactic and therefore the protection of the operator should be carefully studied.

8. That the best method of protecting both operator and patient is to confine the radiations to the area to be examined or treated.

9. That this can best be accomplished by surrounding the tube or source of all radiations by sheet lead of sufficient thickness, or the weight known as six pounds to the square foot over the active hemisphere of the tube.

10. That the entire tube should be enclosed in a box of sheet lead having diaphragms of varying size through which alone the rays are permitted to pass.

11. That this material can be employed by having an air insulation

of four inches on each side of the tube or a total of six inches, which gives a sufficient working variation for the internal resistance of the tube.

GENERAL RÉSUMÉ BY THE REVIEWER

The Roentgen ray as a therapeutic measure seems to have well established itself, and to occupy a larger field at the close of the year than at the beginning. The literature of the year, while quite extensive, is on the whole of a very conservative and credible type. The unreasonable statements and unbelievable reports of early years (though really comparatively few in number) have practically disappeared, and Roentgen therapy is being handled in a scientific manner. Radiography and radiotherapy are more and more every year tending to become a specialty, and must, from the nature of the work itself, be such. An agent, the effects of which upon the tissues are so definite and so powerful, and the ill effects of which, when improperly applied, are so irremediable, must of necessity be used only by those who thoroughly understand it. Proper use of the Roentgen ray, based upon a knowledge of the pathologic condition it is desired to affect, and upon a knowledge of the physiological action of the ray on normal and abnormal tissues, will be followed by uniformly successful outcome.

The three greatest needs in this branch of medical science are, first, a convenient and uncumbersome method of protecting the patient; second, a convenient and uncumbersome method of protecting the operator, and third, a convenient and uncumbersome method of measuring the dosage in standard units.

OBITUARY.

Adrien Doyon, the founder of the "Annales de Dermatologie et de Syphiligraphie" has recently passed away at the advanced age of eighty years. His perseverance, ability and force of persuasion contributed more, perhaps, than the work of any other man in making the "Annales," founded in 1868, one of the best as well as one of the oldest dermatological journals in the world. His translations of the works of Hebra, Kaposi, Neisser, Auspitz, Finger, etc., and his indefatigable labour in reviewing the innumerable productions of German science has undoubtedly aided in stimulating the young workers in this field in France to win back from Vienna the prestige of Paris as a Dermatological centre.

The writer made his acquaintance at the elbow of Sabouraud where Doyon frequently came to follow the Paris clinics with all the interest of a beginner. And it was with true regret that his absence prevented a renewal of his acquaintance at Uriage-les-bains upon a visit made by the writer in the spring of 1900. The high esteem of these baths in the treatment of cutaneous and specific affections was largely due to his writings and to the confidence of the profession in his ability and honesty.

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- Fumigation.
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- By conception.
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- Syphilitic immunity.
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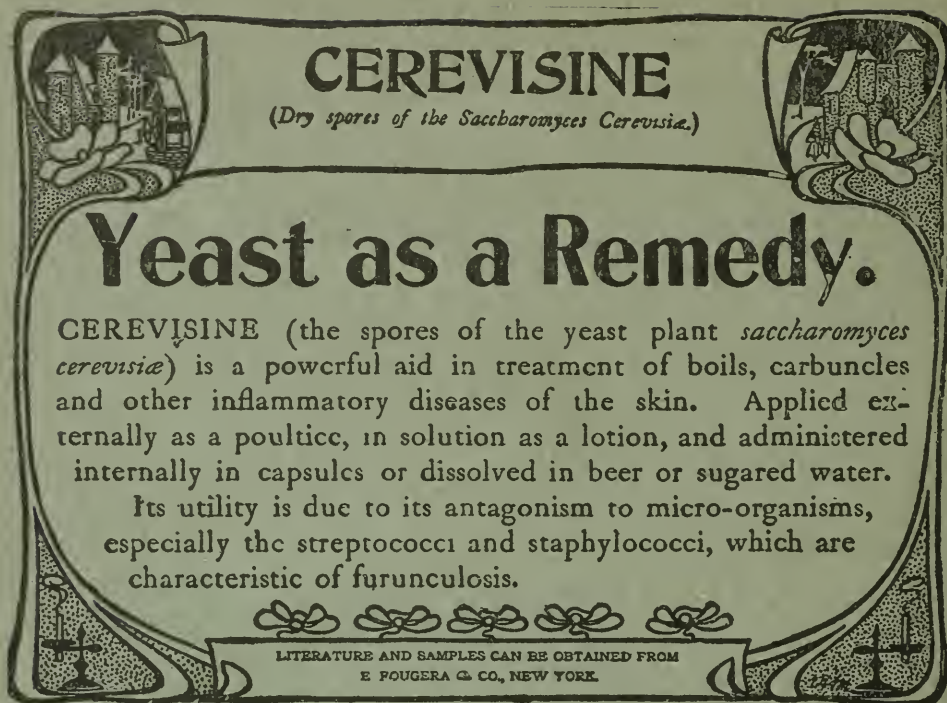
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